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# STATISTICS OF LAND-GRANT COLLEGES AND AGRICULTURAL EXPERIMENT STATIONS, 1912.

By Butler B. Hare, Assistant in Agricultural Education.

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The following statistical statements relate to the institutions established under the acts of Congress of July 2, 1862, and August 30, 1890, most of which maintain courses of instruction in agriculture, and to the agricultural experiment stations, which, with few exceptions, are organized under the act of Congress of March 2, 1887, and are conducted as departments of the institutions receiving the benefits of the land-grant act of 1862. These statistics have been compiled in part from the annual reports of the presidents of these institutions made on the schedules prescribed by the Commissioner of Education. Tables showing the annual disbursements on account of the acts of Congress of March 2, 1887, August 30, 1890, March 16, 1906, and March 4, 1907, prepared from figures furnished by the Departments of the Treasury and the Interior, are also included. Owing to the complex organizations of many of the institutions, it is impracticable to give exactly comparable statistics in all cases, and in some instances the data furnished are incomplete.

# SUMMARY OF STATISTICS OF LAND-GRANT COLLEGES.

Educational institutions receiving the benefits of the acts of Congress of July 2, 1862, August 30, 1890, and March 4, 1907, are now in operation in all the States and Territories except Alaska. total number of these institutions is 67, all of which maintain courses of instruction in agriculture. The aggregate value of the permanent funds and equipment of the land-grant colleges and universities in 1912 is estimated to be as follows: Land-grant fund of 1862, \$13,533,868.64; other land-grant funds, \$3,390,215.83; other endowment funds, \$20,129,479.44; land grant of 1862 still unsold, \$5,165,-209.81; farms and grounds owned by the institutions, \$22,023,266.60; buildings, \$44,459,391.12; scientific apparatus, machinery, and furniture, \$12,594,728.25; libraries, \$5,636,297.92; live stock, \$796,-959.66; total, \$127,729, 315.17. The income of these institutions in 1912, exclusive of the funds received from the United States for agricultural experiment stations (\$1,476,643.72), was as follows: Interest on land-grant funds of 1862, \$831,587.51; United States appropriation under acts of 1890 and 1907, \$2,520,502.54; interest

endowment or regular appropriation, \$1,177,197.64; State approriation for current expenses, \$6,937,410.97; State appropriation for increase of plant, \$4,647,746.97; income from endowment other than Federal or State grants, \$660,779; tuition and incidental fees, \$3,654,050.11; private benefactions, \$2,384,947.71; miscellaneous, \$2,296,065.41; total, \$25,967,130.45. The value of the additions to the permanent endowment and equipment of these institutions in 1912 is estimated as follows: Permanent endowment, \$1,809,100.40; buildings, \$4,721,467.79; libraries, \$283,725.62; apparatus, \$573,186.90; machinery, \$270,547.61; live stock, \$141,412.15; miscellaneous, \$438,721.40; total, \$8,238,161.87.

The number of persons in the faculties of the colleges of agriculture and mechanic arts for white persons was as follows: For preparatory classes, including secondary schools of agriculture, 626; for collegiate and special classes in agriculture, mechanic arts, and in all other instruction, 3,569; total, counting none twice, for interior instructions, 3,835. There were also 161 instructors giving full time and 525 giving part time to agricultural-extension work, 1,583 experiment-station officers, and 2,705 persons in the faculties of other colleges or departments, making a grand total, counting none twice, of 7,192 persons engaged in instruction and research in the land-grant institutions.

The number of persons in the faculties of the colleges of agriculture and mechanic arts for colored persons was as follows: For preparatory classes, 280; for collegiate and special classes, 107; total, counting none twice, 351. In the other departments the faculties aggregated 126, making a grand total of 474 persons in the faculties of the institutions for colored persons.

The students in 1912 in the colleges for white persons were as follows: (1) By classes-Preparatory or secondary schools of highschool grade, 7,248; collegiate, 30,532; postgraduate, 1,326; one to two year and winter courses, 10,845; summer courses, 4,749; total, counting none twice, in interior courses, 53,764. There were also enrolled in correspondence courses, 33,149; in extension courses of five days or longer, away from college, not including farmers' institutes, 106,516; in all other departments of the institutions, 32,685: total number of students, counting none twice, receiving instruction from these institutions, 242,954. (2) By courses: Four-year-Agriculture, which may include a number of students pursuing courses in dairying, animal husbandry, poultry husbandry, or other allied courses, 8,737; horticulture, 322; forestry, 487; veterinary science, 664; home economics, 2,664; engineering, 14,337. Shorter than four year-Agriculture, 8,905; horticulture, 272; forestry, 19; total, counting none twice, 9,196; veterinary science, 84; home economics, 1,103; teachers' courses in agriculture, 1,886 (one to three year, 188;

summer schools of agriculture, 1,698); mechanic arts, 541; military

tactics, 19,954.

The students in colleges and schools for colored persons were as follows: (1) By classes—Preparatory, 5,317; collegiate, 1,544; short or special, 1,135; other departments, 596; total, 8,495. (2) By courses—Agriculture, 2,173; teachers' courses in agriculture, 821 (one to four year, 194; summer schools, 627); industrial courses for boys, 2,047; industrial courses for girls, 3,736; military tactics, 2,448.

The graduates in 1912 in the institutions for white persons were as follows: Agriculture, 1,200; mechanic arts, 2,260; home economics, 427; all other courses, 4,494; total, 8,370. The total number since the organization of these institutions is 103,736. The graduates in the institutions for colored persons were 131, and the total number since the organization of these institutions is 7,458. The total number of volumes in the libraries was 2,799,775, and the total number of pamphlets 823,410. The total number of acres of land granted to the States under the act of 1862 was 10,570,842, of which 652,617 are still unsold.

# SUMMARY OF STATISTICS OF THE STATIONS.

Agricultural experiment stations are now in operation under the acts of Congress of March 2, 1887, and March 16, 1906, in all the States and Territories, and under special appropriation acts in Alaska,

Hawaii, Porto Rico, and Guam.

In Alabama, Connecticut, Hawaii, Louisiana, Missouri, New Jersey, New York, North Carolina, and Virginia separate stations are maintained wholly or in part by State funds. A number of substations are also maintained in different States. Excluding the substations, the total number of stations in the 48 States is 59, and in the United States, including Alaska, Hawaii, Porto Rico, and Guam, 65. Of these, 50 receive appropriations provided for by the acts of Congress approved March 2, 1887, and March 16, 1906, and 4 by other Federal enactments.

The total income of the stations maintained under the acts of 1887 and 1906 during 1912 was \$4,068,240.09, of which \$1,440,000 (Hatch fund, \$720,000; Adams fund, \$720,000) was received from the National Government, the remainder \$2,628,240.09 coming from the following sources: State governments, \$1,492,798.12; individuals and communities, \$54,878.51; fees for analyses of fertilizers, \$129,884.61; sales of farm products, \$230,271.81; miscellaneous, including all balances, \$720,407.04. In addition to this, the Office of Experiment Stations had an appropriation of \$424,000 for the past fiscal year, including \$30,000 each for the Alaska, Hawaii, and Porto Rico Experiment Stations, \$15,000 for the Guam Experiment Station, \$15,000

for nutrition investigations, \$100,000 for irrigation investigations, \$100,000 for drainage investigations, and \$10,000 for farmers' institutes and agricultural schools. The value of the additions to the equipment of the stations in 1912 is estimated as follows: Buildings, \$1,003,516.47; libraries, \$45,462.83; apparatus, \$71,492.73; farm implements, \$70,659.64; live stock, \$99,774.49; miscellaneous, \$215,221.79; total \$1,506,127.95.

The stations employ 1,583 persons in the work of administration and inquiry. The number of officers engaged in the different lines of work is as follows: Directors, 57; assistant directors, 25; chemists, 250; agriculturists, 32; agronomists, 91; animal husbandmen, 120; dairymen, 90; veterinarians, 60; entomologists, 101; botanists, 61; horticulturists, 121; poultrymen, 40; plant pathologists, 61; zoologists, 3; meteorologists, 9; pomologists, 16; foresters, 21; mycologists, 21; biologists, 7; geologists, 2; plant breeders, 16; bacteriologists, 40; animal pathologists, 8; viticulturists, 5; soil specialists, 50; irrigation and drainage engineers, 26; agricultural engineers and farm mechanics, 15; extension work and farmers' institute directors, 19; farm management, 6; animal nutrition, 11; fertilizer and feed inspectors, 16; agricultural education, 5; in charge of substations, 55; farm and garden foremen, 43; secretaries and treasurers, 22; and librarians, 22.

There are also 56 persons classified under the head "Miscellaneous," including gardeners, laboratory and field assistants, herdsmen, editors, inspectors, etc. Six hundred and fifty-eight officers do more or less teaching in the colleges with which the stations are connected. During the year the stations published 719 annual reports, bulletins, and circulars, which were supplied to over 1,016,613 addresses on regular mailing lists. Most of the stations report a large and constantly increasing correspondence with farmers on a wide variety of topics.

# STATISTICS OF THE LAND-GRANT COLLEGES AND UNIVERSITIES.

Unless otherwise specified, the statistics reported in the tables are for the institutions as designated in the list given below.

Institutions established under the land grant act of July 2, 1862, and their courses of study.

[All of the institutions in this list, except those marked with an asterisk (\*), maintain courses of instruction in agriculture.]

E				Collegiate courses of study (undergraduate).	udy (undergraduate).
State of Territory.	Name of institution.	Location.	President.	Four-year courses and degrees.2	Shorter courses.
Alabama	Alabama Polytechnic Institute.	Aubum	Alabama Polytechnic Auburn C. C. Thach, M. A., Institute.	Agr., civil engin., archi, elect. engin., mech. engin., mining engin., phar., general chen. and negal. (B. S.), phar. (2 yrs., Ph. G., 3 yrs., Ph. C.), vet. med and sur-	Agr., mech. arts (2 yrs.), applied electricity (2 yrs.), summer school for farmers (10 days).
	Agricultural and Mechanical College for	Normal	W. S. Buchanan, B. S. A.	gery (3 yrs., D. V. M.). Sci., agr., mech. (B. S. and B. Pd.)	Indus, and lit. studies (1 to 4 yrs.), teachers' training course; com. course (2 yrs.).
Arizona	University of Arizona.	Tucson	Arthur H. Wilde, Ph. D.	Lit. (A. B.), sci., metal., mining engin., civil engin., mech. engin., elect. engin.,	Agr. (2 yrs.), prep. (4 yrs.).
Arkansas	University of Arkan- sas.	Fayetteville	University of Arkan- Fayetteville J. N. Tillman, LL, D	agr. (4 yrs.) (b. S.), elect. engin. (4 yrs.). Agr. (B. S. A.), mech. engin. (B. M. E.), elect. engin. (B. E.), civil engin. (B.	Agr., hort., dairying, elect. engin. (2 yrs.), mech. arts (2 or 3 yrs.), prep. (1 yr.), agr.
				c. E.), mining engin. (D. M. E.), enem. engin. (B. Ch. E.), chem. (B. S. C.), phys. (B. S. in Phys.) lit. and sci. (B. A. and B. S.) music (R. Mus.) normal (I. 1.)	(a weeks), art (1 yr. and 4 yrs.); cor. courses in agr.; teachers' course in agr. (1 yr.).
	*Branch Normal Col- Pine Bluff.	Pine Bluff	F. T. Venegar.	Clas. (B. A.), normal (L. I.)	Prep. (3 yrs.), manual training, mech. arts
California	University of Califor- Berkeley	Berkeley	B. I. Wheeler, Ph. D., LL. D.	Letters (A. B.), social sci. (B. L.), natural sci., commerce, general and tech. agr. (4 yrs. each), mech. engin., elect. engin.,	Agr., agr. (2715.), dont. Sor. (4715.). Agr., animal indus. and vet. Sci., irrig., poultry husb., dairying, nutrition, ent., vit., hort. (2-8 weeks each), summer ses-
Colorado	The State Agricultural College of Colorado.		Fort Collins C. A. Lory, M. S., LL. D.	mining and medial, civil engin, chem, sugar technol. (B. S.) (4 and 5 yrs. each). Agron, animal husb., ent., forestry, hort, mech. engin, civil and irrig, engin, elect. engin, everal sci., home econ. (B. S.), vet. med. (D. V. M., 3 yrs.).	sion (6 weeks), farmers' week.  Agr., mech. arts, domestic sci. (3 yrs. of 6 months each; optional fourth year of 6 months for college eutrance), farmers' and dom. sci. week.
<sup>1</sup> Includin	g also institutions receiv	ing apportionments f	Including also institutions receiving apportionments from the appropriations of 1890 and 1907.		<sup>2</sup> Four-year course unless otherwise specified.

Institutions established under the land-grant act of July 2, 1862, and their courses of study—Continued.

	A TO ME			Collegiate courses of st	Collegiate courses of study (undergraduate).
State or Territory.	Name of institution.	Location.	President.	Four-year courses and degrees.	Shorter courses.
Connecticut	Connecticut Agricul- tural College.	Storrs	C. L. Beach, B. Agr., B. S.	Agr. (B. S.).	Agr. (including dairy and poultry husb, and hort.) (4 yrs., diploma with 2 yrs. of previous preparation in high school), school of mech. arts., agr., home econ., (2 yrs., each), summer school of nature study and
Delaware	Delaware College	Newark	G. A. Harter, M. A	Arts and sci. (B. A. and B. S.), agr., general sci., civil engin., mech. engin., elect.	Agr. (2 yrs.), farmers' week, 8 weeks course in agr.
	State College for Col-	Dover	W. C. Jason, A. M.	Acad. agr. (B. Agr.), mech. arts. (B. E.), dom. sci.	Normal (4 yrs.), industrial prep. (2 yrs.).
Florida	University of the State of Florida.	Gainesville	A.A. Murphee, A. M., LL. D.	Lif. (B. A.), pedag. (B. A. in Ed.), gen. sci., agrout, hort, animal husb., agr-chem., agr-pedag., mech. engin., elect. engin., civil engin. (B. S.), law (LL. B.).	A
	Florida State Normal and Industrial School.	Tallahassee	N. B. Young, M. A	Sci. (B. S.)	English normal (2 yrs.), high school (3 yrs.), grammar school (3 yrs.), grammar school (3 yrs.), indus and agr. training through all courses, correspourse in agr. and laboratory courses in
Georgia	Georgia State College of Agriculture and Mechanic Arts.	Athens	A. M. Soule, B. S. A., D. Sc.	General sci., agr., civil engin., elect. engin., forestry (B. S.), phar. (2 yrs., Ph. C.).	gen. agr. 48. Agr., dairying (1 yr.), agr. (winter, 12 weeks), cotton grading (Jan. and July, 5 weeks each), cotton genool (winter, 10 days), and since the convention of the
	Georgia State Indus-	Savannah	R. R. Wright, A. M.,	Collegiate (A. B.)	Normal (3 yrs.) industrial, prep. (3 yrs.)
Hawaii Idabo.	College of Hawaii	Honolulu Moscow	more, M. S. A Lean, Ph.D.,	Clas. (B. A.) set, (B. S.), agr., home econ., engin. (B. S.), more, collas, (B. A.) set, (B. S.), agrou, animal husb., dairying, hort., forestry (B. S. Agr.), home econ. (B. S. A. E.), civil engin. (B. S. C. E.) mining engin. (B. S.	Agr., dom. sel., miscel. (10 weeks), corresp. Agr. (3 vr.), dairying (com'l. 1 vr.), forest rangers (winter), home econ. (3 vrs.), teacher's course in agr. (1 vr.).
Dinois.	University of Illinois	Urbana	E. J. James, Ph.D., LL. D.	M. E.), elect. engin. (B. S. E. E.), mech. engin. (B. S. M. E.), chem. engin. (B. S. Chem.), law (3 yrs., Ll. B.). Lit. and arts, general sci. (B. A.), archi, archi, engin., archi decoration, civil, engin., elect. engin., mech. engin., railway engin., municipal and sanitary engin, municipal scamice engin, chem. engin., sci., agr., household sci., landscape gard. (B. S.), music (B. M.),	Summer school, including secondary and el. agr. for rural teachers (6 weeks), agr. and domestic sci. (2 weeks).

<sup>1</sup> To take charge Sept. 1, 1912.

Agr. and hort., animal husb., dairy husb., don. sci. and agr. (witner, 8 weeks), burter making (10 days, winter), farmers' week, fruit growing (10 days).	Agr. (2 yrs.), mining engin., elay working (2 yrs.), piprp. (1 yr.), dairying (1 yr.), poulty husb. (1 yr.), dairying (1 we.s.), corn and grain judging, stock judging, domestic econ., hort, and forestry, agreegin., dairying, poultry husb. (whiter, 2 weeks each), summer vacation school of road investigation, agr., animal husb., but dairying, hort, manual training, house-ball of the property of th	Prep. (2 yrs.), agr. (2 yrs.), domestic sci. (2 terms, 12 weeks each), farmers' (2 winter terms, 10 weeks each), summer, homecon. course for teachers (10 weeks ach), summer, homemal, (1 yr., winter) agr., manual training, dom. sci., for teachers (summer, 6 weeks), farmers' week, corresp. courses in	Agr. (2 yrs.), prep. (3 yrs.), rural and high- way engin. (2 yrs.), mining engin. (2 yrs.), pract. mining (6-10 weeks.), agr. (winter, 10 weeks.), farmers' week.	Normal (3 or 4 yrs.), agr., carpentry, cooking, music dressnaking, printing, blacksrinting, wheelwrighting (3 yrs.), business (2 yrs.), manual training courses in meth. draw, agr., printing, carpentry, and cooking.	Agr. (3 yrs.), agr. (2 weeks, winter), summer school including agr. for teachers and others (9 weeks).	Soi. agr., high school, printing girls' indus. (4 yrs.), clas., normal, manual training, granmar, mech. drawing, thismithing, wheelwrighting, dom. sci. (3 yrs.), bookkeeping, typewriting (2 yrs.), music (5 yrs.), agr. (1 yr. for students over 18 yrs.).
libr. sci. (B. L. S., 5 yrs.), med. (M. D.), dentistry (3 yrs., D.D.S.), phar. (2 yrs., Ph. G.), Jaw (3 yrs., LL. B.), phar. chem. (2 yrs., Ph. C.). Mech. engin. (B. S. M. E.), civil engin. (B. S. c. E.), elect. engin. (B. S. E. E.), chem. engin. (B. S. Ch. E.), agr. (B. S. Agr.), sci., phar. (2 yrs., Ph. C.), agr. (B. S. Agr.), sci., phar. (3 yrs., Ph. C.), phar. (B. S.)	Agron., darying, animal husb., hort, and foresty agr. engin., sci. and agr. (B. S.), vet. med. (D. V. M.), mech.engin. (B. S.) in M. E.), divil engin. (B. S. C. E.), elect. engin. (B. S. in E. E.), mining engin. (B. S. in M. E.), sci. (B. S.), ceramics (B. S. in M. E.), sci. (B. S.), ceramics (B. S. in Cer.), dom. sci. (B. S. in H. E.).	. Agron., animal husb., dairy husb., hort., mech. engin., general sci., elect. engin., elvil engin., archi., ind. jour., printing indus., journalism (B. S.), vet. med. (D. V. M.), home econ.	Clas. (A. B.), mech. engin. (B. M. E.), civil engin. (B. C. B.), mining engin. (B. E. M.), agr. (B. S. Agr.), sci., dom. sci. (B. S.), education (B. S. Educ. and A. B. Educ.), isw. (2 vrs. [1. R.)		agin, elect. engin, chem. engin, cıvil angin, mech. engin, general sci., premed. (B. S.), commerce, Lat. sci., itt., philos., psychol, and ed. (B. A.), sugar engin. (S. Yrs., B. S.), law (3 yrs., Ll. B.), law	Scientific (B. S.), classical (A. B.)
W. E. Stone, Ph. D., LL. D.	R. A. Pearson, M. S.	H. J. Waters, B. S. A	Henry S. Barker, LL. D.	J. S. Hathaway, A. M., M. D.	T. D. Boyd, A. M., L.L. D.	H. A. Hill.
Lafayette	Апез	Manhattan	Lexington	Frankfort	Baton Rouge	New Orleans
Purdue University	Iowa State College of Ames. Agriculture and Mechanic Arts.	Kansas State Agricultural College.	State University	The Kentucky Normal and Industrial In- stitute for Colored Persons.	Louisiana State University and Agricultural and Mechanical College.	Southern University and Agricultural and Mechanical College.
Indiana	Іожа	Kansas	Kentucky		Louisiana	

Institutions established under the land-grant act of July 2, 1862, and their courses of study—Continued.

				Collegiate courses of study (undergraduate)	udy (undergraduate).
State or Territory.	Name of Institution.	Location.	Fresident.	Four-year courses and degrees.	Shorter courses.
Maine	University of Maine	Orono	R. J. Aley, Ph. D	Clas., sc., (B. A.) agron., animal husb., hort., home econ., chem., civil engin., mech. engin., elect. engin., chem. engin., forestry, phar., el. agr. for teachers (B. S.), law (3 yrs., LL.B.), phar. (2 yrs., Ph. C.).	Secondary agr. (2 yrs.), agr. for teachers (1 yr.), home econ. for teachers (2 yrs.), agr. and dairying (4 weeks), poultry management, hort. (3 weeks, spring), summer school for teachers (6 weeks), farmers' week, reading and correspondence courses
Maryland			R. W. Silvester, M. S., LL. D.	Agron., animal husb., hort., chem., gen. course, biol., mechan. engin., civil engin., elect. engin. (B. S.).	Agr., hort. (2 yrs.), prep. (1 yr.), agr. and hort. (winter, 10 weeks).
	Princess Anne Academy.	Fincess Anne	T. H. Kiah		College prep. and normal (4 yrs.), grammar (2 yrs.), indus. courses in agr., dairying, blacksm., wheelwr., carpentry, printing,
Massachusetts	Massachusetts Agri- cultural College.	Amherst	K. L. Butterfield, A. M., LL. D.	Agr. (B. S.)	den. St. and at. 18. (winter, dairying (winter, 10 weeks), poultry mgt. (2 weeks), beekeping (May), summer school of agr., school gard., home econ., etc., for teachers et al. (2, 4, and 6 weeks), farmers' week, correct courses.
	*Massachusetts Insti- tute of Technology.	Boston	R. C. Maclaurin, M. A., LL. D., D. Sc.	Civil engin., mech. engin., mining engin. and metal., activ., chem., elect. engin., biol., phys., electro-chem., chem. engin., sanitary engin., gool. and geodesy, naval.	original contract
Michigan	Michigan State Agri- cultural College.	East Lansing	J. L. Snyder, Ph. D., LL. D.	Agr., engil., hort, forestry, home econ. (B. S., each 4 and 5 yrs.), vet. sci. (D. V. S.).	Prep. (1 yr.), agr. for teachers (1 yr.), cheese making (4 weeks), general agr., poultry husb. (2 winter terms of 8 weeks each), creamery (2 winter terms of 6 weeks each), hort. (4 weeks, winter), forestry (1 summer term of 8 weeks each), college ext.
Minnesota	The University of Minnesota.	Minneapolis	G. E. Vincent, Ph. D., L.L. D.	Sci. lit., and arts (B. A.), civil engin. (C. E.), mech. engin. (M. E.), elect. engin. (E. E.), mining, metal. (E. M. Met. E.), etem. (B. S. in Chem.), agr. (B. S.), forestry (B. S.), home econ. (B. S.), education. (B. A. in Ed.), agr. (summer, 6	reading course. Sec. agr. (3 yrs.), agr. (4 weeks), forestry, dairying (winter, 4 weeks), traction en- gin. (4 weeks), el. agr., nature study and dom. sci. and art for teachers (summer, 6 weeks).
Mississippi	Mississippi Agricultural and Mechanical College.		Agricultural Col- J. C. Hardy, A. M., lege.	Weeks). Agr., mech. engin., elect. engin., civil and mining engin., textile indus., indus. education, gen. sci. (B. S.).	Agr., mech. arts. textile (2 yrs.), prep. (1 yr.), pract. working boys' course (1 yr.), agr. (10 weeks), summer normal school

	DIA.	LIDITOD	OF THE	COLLEGES A	II D	DIAII	OIND.	27
for teachers (4 weeks), agr. (summer, 2-4 weeks), teachers' short course indus. educa. agr., manual training. Carp., blacksr. (4 yrs.), shoemak, nurse training, paint, don. sci., millinery, etc. (3 yrs.), agr. (2 yrs.), college prep. (3 yrs.), wignery (3 yrs.), with the second seco		home econ. (winter, 7 weeks).  Normal, subnormal (4 yrs. each), indus. (3 yrs.), agr., dom. sci. and art, mech. draw., carpentry, blacksmithing, mach. and engin. (2 yrs.), summer school (9	<u>a</u>	Vocational agr., home econ. (4 yrs. each), high and normal and grade and rural school teachers' courses in agr., home econ., and manual training (1 yr. each), home econ. for teachers (2 yrs.), agr. (winter, 7 weeks.), teachers summer school, including agr. and home econ. (8 weeks.), corresp. courses in soils, cereal and forage crops, and elementary agr. for high-school	Winter short course in dairying.	Agr. (2 yrs.), dairying (winter, 10 weeks), farmers' week.	Clay working (2 yrs.), general agr. and dairy farming, poultry husb., fruit growing, and market gardening (winter, 12 weeks each), farmers' week.	Sec. indus. agr., indus. mech., indus. dom. sci., indus. business, prep. (4 yrs. each), Engl. and EnglSpanish sten. (1 yr. each), farmers' week.
Sci., agr. (B. S.)	Gen. sci. (B. A.), agr., home econ. (B. S.), forestry (M. E.), civil engin. (B. S., C. E.), mech. engin., min. engin. (B. S., M. E.), elect. engin. (B. S., E., E.), chem. engin., chem. and metal., journalism.	educ. (B. S.), law (3 yrs., LL. B.). Collegiate (B. A.)	Mech. engin. (B. M. E.), elect. engin. (B. E. E.), civil engin. (B. C. E.), agron., animal husb. and dairying, hort., home econ., chem., blol., mathphys., history—us. Ph. C. yecterarial (B. S.), phar. (2	Clas., it. (B. A.), general sci., general sgr., home econ., agr. engin., civil engin., electengin., municipal engin., mech. engin., forestry, phar. (B. S.), teachers' course (B. A. and B. S.), med. (M. D.), law (3 yrs., L.L. B.), phar. (3 yrs., Ph. C., 2 yrs., Ph. G.).	Liberal arts (B. A.), mining engin., agr., domestic sci., mech. engin., civil engin.	etett, engl., ett., general sci. (D. S.). Agr., mech. englin., elect. englin., chem. englin., arts and sci. (B. S.).	Clas. (A. B.), Lat. sci. (Litt. B.), general sci., agr., civilengin., mech. engin., elect. engin., chem., biol., and ceramics (B. S.).	Agr., mech. engin., civil engin., elect. engin., household econ., commerce, general sci. (B. S.).
J. A. Martin, A. M	A. B. Hill, A. B., Ph. D., LL. D.	B. F. Allen, A. M., LL. D.	J. M. Hamilton, M. S	Samuel Avery, Ph. D.	J. E. Stubbs, M. A., D. D., LL. D.	W. D. Gibbs, D. Sc	W. H. S. Demarest, A. M., D. D., LL. D.	W. E. Garrison, Ph. D.
Alcorn	Columbia	Jefferson	Вогетап	Lincoln	Reno	Durham	New Brunswick	Agricultural College.
Alcom Agricultural and Mechanical Col- lege.	University of Missouri.	Lincoln Institute	Montana Agricultural College.	University of Nebraska.	University of Nevada.	The New Hampshire College of Agricul- ture and Mechanic	Rutes. School, the New Jersey State College for the Benefit of Agriculture and Me-	Change Aris.  New Mexico College of Agriculture and Mechanic Arts.
	Missouri		Montana	Nebraska	Nevada	New Hampshire	New Jersey	New Mexico

14740°—13——2

Institutions established under the land-grant act of July 2, 1862, and their courses of study—Continued.

Name of inst	institution.	Location.	President.	Collegiate courses of s Four-year courses and degrees.	Collegiate courses of study (undergraduate). es and degrees. Shorter courses.
New York State Col- lege of Agriculture at Cornell Univer- sity.		1	J. G. Schurman, A. M., D. Sc., LL. D.	, arts (A. B.), civil engin. (C. E.), mech. engin. (M. E.), elect. engin. (B. E.), archi. (B. Arch.), arr. (B. S. A.), vef. med. (3 yrs., D. V. M.), graduate law (3 yrs.,	
The North Carolina West Raleigh	Ra <b>le</b> igh	:	D. H. Hill, A. M., L.L. D.	LL. B.J., med. (M. D.), chem. (B. Chem.), Agr. (B. S.), mech. engin., civil engin., elect. engin., textile sci. and art (B. E.), chem., dyeing (B. S.).	
The Agricultural and Greensboro	sboro	:	J. B. Dudley, A. M., LL. D.	Agr. (B. S.), mech. (B. S.)	hist. Trade course (4 yrs.), summer school (6 weeks).
not used a vace. North Dakota Agri- cultural College. Hege.	ultural Col-		J. H. Worst, L.L. D	Agr., gen. sci., home econ., biol., mech. engin., civilengin., pharm., chem., chem. engin., education, vef. sci. (B. S.).	Farm husb., power mach. (3 yrs. each), phar., home econ. (3 yrs.), high-school egr., commerce, dom. sci., meth. arts and manual training, general sci. (4 yrs.), nature study, el. agr., dom. sci. and manual training for rural teachers (4 yrs.), agr., steam engin. (whiter, 10 weeks each), traction engin. (summer, 4 weeks), summer school for teachers, including agr., nature study, and home econ. (4 weeks).
Ohio State University Columbus	abus		W. O. Thompson, A. M., LL. D., D. D. D.	Agr. (B. S. Agr.), ed., hort., forestry, dom. soi., chem. engm., manual training, phar. (B. S.), arts, philose, and soi. (B. A.), archi. (C. E. in Archi.), civil engin. (C. E.), ceramic engin. (Cer. E.), min. engin. (G. M.), elect, engm. (M. E.), min. engin. (M. E.), meth, engin. (M. E.)	7
Oklahoma Agricultu- Stillwater College.			J. H. Connell, M. S	D. V. M.), law (3 yrs., I.L. B.). Agr., animal hub., hort, agrou, dary hubs, mech. engin., archi and civil engin., elect. engin., sci. and iit, dom. sci. and art, normal (B. S.).	Sec. agr. and dom. sci. (2 yrs.), business, agr. (1 yr.), agr. and dairy (winter, 10 weeks), darying (winter, 4 weeks), cotton grading (3 weeks), eacream making (2 weeks), milk and cream testing (1 week), summer normal for teachers of agr. (6 weeks), reading course in agr. for teachers (2 yrs.), farmers' week, agr. and dom. sci. (1 week).

	5.	IMITOTION OF TE	LE COL	LEGES	AND	STATIO	NS. Z	40
clas. (B. A.), sci. (B. S.), normal (B. S. D.), Normal, el. with required agr. (4 yrs. each), agr. (B. S. Agr.), elect. engin., mech. en. prep. (3 yrs.), agr. (1 yr.), gin., archi. engin. (B. M. E.), trade courses in carpentry, mach.	Joucksin, Frem reight, (3 VFz.)  Sec. agr., dom. scl. and art, commerce, for- setty, mech. art is (2 VFz.), phar. (2 VFz.), agrou., animal husb., dalrying, hort., for- est rangers, dom. scl. and art, mech. arts, (whiter, 4 weeks each), summer school for teachers, including agr, and home coon.	(6 weeks), larmers week, must. Agr., mech. arts for teachers (2 yrs.), agr., nort., dairy nush., dairy manf., poultry husb., home econ. (12 weeks), summer session for teachers (6 weeks.), 33 corresp. courses in agr. and dom. sci., farmers week, teachers' course in agr. (1 yr.).	Normal nature study, el. agr., sewing, bot., zool. (18 weeks each), dom. sci., school gardening (1 yr. each).	Agr. (2 yrs.), mech. arts (2 yrs.), dom. sci. (2 yrs.), poultry school (writer, 6 weeks), summer school for teachers et al. in el. agr., nature study, school gard, and dom.	sci., farmers' week. Textile indus. (2 yrs.), prep. (1 yr.), cot ton grading (4 weeks), farmers' course (winter, 4 weeks), 2-yr. work course in	agr., agr. (4 Jr.). Prep. (3 yrs., Lormal (4 yrs., L. I.), model school. indus., music, art.	Prep., coml. sci., sec. agr. and home econ. (3 yrs.) 2 yrs. normal in home econ., music (2 courses, 3 yrs. each), steam engin. (5 months), creamery (3 months), agr. and home econ. (12 weeks), agr. (winter, 2 weeks), summer session for teachers, including agr., home econ., etc. (3 weeks), corresp. courses in agr. nature et drudy and home econ.	(1 yr.).
	Agron., hort., animal husb., agr. chem., dairy husb., etc., bost., ver. sci., poultry husb., mech. engin., elect. engin., civil engin., mining engin., dom. sci. and art., forestry, phar., commerce (B. S.).	5	(B. S.) Agron, animal husb., bot, chem., dom. sci., hort., phys., scol, ed., manual train- ing farm man, soils, rural econ., forestry, bact., ont., ct-yr. courses, but no degrees	conterred.  Agr., mech. engin., civil engin., chem. engin., elect. engin., teachers' course in applied sei, home econ. (B. S.).	Agr., agr. and chem., agr. and animal husb., mech. and elect. engin., civil engin., chem., textile indus., archi., engin.	(B. S.). Collegate (B. A.), mech. (B. S.), agr. (B. Agr.).	Agr. home econ., general sci., mech. engin., elect. engin., civil engin., phar. (B. S.), phar. (2 yrs., Ph. G.).	
I. E. Page, A. M	W. J. Kerr, D. Sc	E. E. Sparks, Ph. D., LL. D.	E. M. Bainter	Howard Edwards, M. A., LL. D.	W. M. Riggs, E. M. E., LL. D.	R. S. Wilkinson, Ph. D.	R. L. Slagle, A. M., Ph. D.	
:	Corvallis	State College	San Juan	Kingston	Clemson College	Orangeburg	Brookings	
Agricultural and Normal University.	Oregon State Agricultural College.	The Pennsylvania State College.	University of Porto Rico.	Rhode Island College of Agriculture and Mechanic Arts.	The Clemson Agricul- tural College of South Carolina.	The Colored Normal, Industrial, Agricul- tural and Mechani- can College of South	South Dakota State College of Agricul- ture and Mechanic Arts.	
	Oregon	Pennsylvania	Porto Rico	Rhode Island	South Carolina		South Dakota	

Institutions established under the land-grant act of July 2, 1862, and their courses of study—Continued.

State or Territory.	Name of institution	Location	Drosidont	Collegiate courses of st	Collegiate courses of study (undergraduate).
				Four-year courses and degrees.	Shorter courses.
Tennessee	University of Tennessee.	Knoxville	Brown Ayres, Ph. D., LL. D., D. C. L.	Lit, (B. A.), agr., home econ., sci., civil engin., mech. engin., elect. engin., mining engin., metal. engin., ethem. engin. (B. S.), med. (M. D.), education (B. A. and B. S. in Ed.), dental surgery (3 yrs., D. B. S.) law.	El agr. for negroes (4 yrs.), agr., prep. med. (2 yrs. each), agron., hort., animal husb., dairy husb., beekeeping, home econ. (10 weeks, in succession 2 weeks each), summer school of agr. for weeks, and agr., for weeks each).
Texas	38.	College Station	R. T. Milner	(1) 2 yrs. (2) 133, 121. (2) yrs. (3) 475, 121. (4) 475, 160c., engin, mech. engin, civil engin, archi, archi, engin, chem. engin, textile engin. (B. S.)	A C
	Prairie View State Normal and Indus- trial College.	Prairie View	E. L. Blackshear 1		Z
Utah.	Agricultural College of Utah.	Logan	J. A. Widstoe, Ph. D	Agron., hort., animal husb. and dairying, home econ. ent., agr. engin., agr. chem., commerce, general sci. (B. S.).	yrs.), summer school.  Manual training in mech arts (4 yrs.), manual training in home econ. (4 yrs.), high-school commerce (4 yrs.), prep. (3 yrs.), commerce (2 yrs., winter), mech. arts (2 yrs., winter), mech. arts (2 yrs., winter).
					Jis., where, agr., dolivers of and mech. arts (8 weeks), forestry (12 weeks), summer school (6 weeks), farmers' round-up and housekeepers' conf. (2 weeks),
Vermont	University of Vermont and State Agricultural College.	Burlington	G. P. Benton, LL. D., D. D.	Clas. (B. A.), lit. sci. (Ph. B.), civil and sanitary engin., elect. engin., mech. engin., elect., engin., edem., agr., commerce and econ., educa-	music. Agr. (winter, 5 weeks); farm dairying (4 weeks), summer school for teachers, including dom. sci. (6 weeks), farmers'
Virginia	The Virginia Agricultural and Mechanical College and Polytechnic Insti-	Blacksburg	P. B. Barringer, M. D., LL. D.	For, nome court (B. S.), med. (M. D.), Agr., hort., applied chem., civil engin, mech. engin, elect. engin, mining engin, chem. engin, agri. engin, metal. and metalography, applied geol., ap-	Agr. (2 yrs.), farmers' winter course (1 month).
	The Hampton Normal and Agricultural Institute.	Натркоп	H. B. Frissell, D. D., LL. D.	pitet bloogy (B. S.).	Academic (4 yrs.), trade (3 yrs.), pract. agr. (3 yrs.), draduate: Agr. (1 yr.), home econ. (2 yrs.), matrons' course (2 yrs.),
					normal (2 yrs.), business (2 yrs.), inorary methods (2 yrs.), summer session for teachers in agr., dom. sci., etc. (4 weeks).

Washington	State College of Wash-   Pullman		E. A. Bryan, A. M., LL. D.	E. A. Bryan, A. M., Math., civil engin., pbys., hydro-elect. englin., domestic econ., par., chem., bot., 2001. econ. soi. and dairying, hort., forestry, vet. sci., econ. soi. and hist., elect. engin., mening engin. (B. S. B. A.) ing (12 weeks), dairying (8 weeks), sumersione school for teachers (6 weeks), 2001., p. W. C. N. W. C. N. Wet. Sci., 12 the decision archit. (B. A.), yet. sci., 12 the decision archit. (B. A.), yet. sci., 12 the decision archit. (B. A.), yet. sci., 13 the decision archit. (B. A.), yet. sci., 14 the decision archit. (B. A.), yet. sci., 15 the decision archit.	Gold and metal mining (2 yrs. each), el. sci. (3 yrs.), art (2, yrs.), 1 yr. course for forest rangers. artisans (1 yr.), bookkeeping sten. (1 yr. each), agr. (20 weeks), mining (12 weeks), dairying (8 weeks), summer science school for teachers (6 weeks), hort.
West Virginia	West Virginia Sity.		T. E. Hodges, A. M., D. Sc.	General culture (B. S. M. B.S.), mech, and elect. engin. (B. S. M. E.S.), mech, and elect. engin. (B. S. M. E.S.), civil engin. (B. S. C. E.) mining engin. (B. S. E. M.), commerce (B. S. Com.), law (4 yrs. L.L. B.).	commerce (2 yrs.), agr., (4 yrs., 6 months each), agr., hort., animal husb., dairying poultiry culture (12 weeks), el. agr. and nature study for teachers (summer, 6 weeks), agr. (farmers course, 23 weeks), agr., short course (winter, 12 weeks)
	The West Virginia Institute		Byrd Prillerman, A. M.	Byrd Prillerman, A. M.	yrs.), music (3 and 4 yrs., cert.), art (4 yrs., diploma).  Normal, agr., acad., mech., printing (4 yrs.), sewing, dressmaking, com'l, cooking, mil-
Wisconsin	University of Wisconsin		C. R. Van Hise, Ph. D., LL. D.	Sci. commerce, journalism (B. A.), normal (B. Ph.), sci. agr. for teachers (B. S. and B. A.), agr., civil engin, mining engin, mech. cengin, elect. engin, applied electrochem, chem., chem. engin, plar, home econ. (B. S.), music (Grad. in Mus.), law (3 yrs. prof., LJ. B.), phar.	Interp (2 yrs.), agr. (2 winter courses, 14 weeks each), darty school (winter, 12 weeks), creamery (summer, 10 weeks), farmers' course (10 days, winter), summer school, including agr. and home econ. (6 weeks), spec. cheese and creamery, housekeepers', loys' corn and seed
Wyoming	University of Wyo-ming.	Laramie	C. O. Merica, A. M., LL. D.	of Wyo- Laramie C. O. Merica, A. M., Liberal arts (B. A.), agr. home econ., engin. (B. S.), commerce (B. S. in Com.).	grain (1 week), housekeepers' conf., corresp.  Prep., commerce (4 yrs.), summer school (6 weeks), music, corresp. courses.

Principal.

### General statistics of land-grant

					F	aculty and	staff.		
		Date of	Date of	Co	ollege of agr	riculture ar	nd mech	anic arts.	
	State or Territory.	estab- lish- ment of in- stitu- tion.	estab- lish- ment of agri- cultural courses.		Interior ins	truction.		Agricu exter depar wor	
	,			Prepara- tory classes.1	Second- ary schools of agri- culture.	Collegiate and special classes.	Total.2	Full time.	Part time.
	AlabamaArizona	1872 1891	1872 1891	13		67 20	67 33	4	10
	Arkansas	1872	1872			4	4	3	
	California	1868	1868		20	88	101	2	2: 5:
	Colorado	1877 - 1881	1878 1881		41 15	49 23	65 25	1	5
	Delaware	1870	1870			13	13		
	Florida	1884	1884		2	18	20	2	1
	Georgia Hawaii Idaho	$\frac{1872}{1907}$	1872 1907	• • • • • • • • • •		27 18	27 18	20	
	Idaho	1892	1892	2	20	35	50	2	1
1	Illinois	1867	1868			156	156	3	
	Indiana	1874	1874			163	163	6	
	Iowa. Kansas	1869 1863	1869 1874			153 131	153 138	17 14	$\frac{1}{2}$
	Kentucky	1865	1880	5		70	70		
	Louisiana	1877	1887		4	48	51	3	
	Maine	1865	1868	13		80 25	91 25		1
	Maryland	1859 1867	1859 1867	7		56	56	1 3	1 2
	Massachusetts (Boston)	1865				4 245	245		
	Michigan	1855	1855			115	115	5	1
	Minnesota Mississippi	1869	1869	3	90	84 60	162 63	13	
1	Missouri (Columbia)	1880 1870	1880 1870	3		67	03	2	4
	Montana	1893	1893	15	15	33	40	1	j
	Nebraska	1869	1869		42	46	49	3	3
	Nevada	1873	1888	12	27	35 46	39 47		
	New Hampshire	1866 1864	1866 1865	14	21	52	63		,
	New Jersey New Mexico New York	1889	1890	3		40	43		
	New York	1865	1865			5 143	143		
	North Carolina North Dakota	1889 1890	1889 1890	33	22	54 50	54 61	3 3	
1	Ohio	1870	1873	00	22	195	195	16	1
ì	Oklahoma	1891	1892	5	47	64	116	4	
	()regon	1868	1888		(6)	108	108	1	
1	Pennsylvania. Porto Rico. Rhode Island.	1855 1903	1859 1904	12		197 22	197 34	2	
1	Rhode Island	1888	1890			31	31	3	
	South Carolina	1889	1893	2 5		53	55	' 5	
	South Dakota	1881	1884		7	48 32	60 44	1	
	Tennessee	1794 1871	1869 1871	12		86	86	6	
	Utah	1888	1889		32	39	71	5	2
	Vermont	1865	1885			21	21		
	Virginia	1872	1872	90		62 96	62 104	5	1
	Washington	1892 1867	1892 1867	36		10	104	2	,
	Wisconsin	1848	1866		33	164	164		2
1	Wyoming	1887	1891	3		27	27		

Including schools of agriculture of high-school grade under the control of the institution.
 Counting none twice.
 Including substations.
 Including 25 lecturers regularly appointed.

colleges for white students, 1912.

Facult	y and s	staff.	Lib	rary.				
College of a ture and chanic arts  Experiment station officers. 3	me-	Total for entire institution, counting none twice.	Number of volumes.	Number of pamphlets.	Number of acres al- lotted to State un- der act of 1862.	Number of acres of land grant still unsold.	Number of acres in farms and grounds.	Rates of interest on land- grant fund of 1862.
54 12 17 60 26 26 32 13 17 8 26 70 52 40 61 34 36 23 14 30 23 14 30 23 17 30 21 79 45 55 18 57 17 39 49 45 57 17 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	76 43 23 66 80 33 11 36 80 239 60 239 60 226 86 86 86 81 50 81 50 48 48 41 62 70 51 80 48 43 71 51 80 48 43 71 51 80 48 49 43 49 64 61 62 119 74 32 80 123 34 164 30	76 43 174 130 80 33 17 18 81 73 543 196 126 165 103 90 117 44 245 44 499 70 238 50 255 57 51 80 48 724 71 90 273 132 132 140 209 43 49 49 49 49 49 40 41 110 80 80 80 80 80 80 80 80 80 80 80 80 80	25,000 18,000 20,000 247,400 40,000 12,000 13,000 13,000 38,100 9,260 27,707 212,700 27,000 35,850 40,916 5,000 3,500 6,000 28,300 124,310 11,708 36,079 160,000 28,300 124,310 11,708 29,650 22,880 30,000 66,991 14,732 449,700 10,528 15,943 19,222 444,613 19,222 444,613 19,222 444,613 19,222 444,613 19,222 445,596 19,210 16,228 15,943 19,222 44,613 19,222 44,613 19,222 44,613 19,222 44,613 19,222 44,613 19,222 44,613 19,222 44,613 19,222 44,613 19,222 44,613 19,222 44,613 19,222 44,613 19,222 44,613 19,223 44,610 19,210 16,235 15,120 34,596	3,500 5,000 19,000 50,000 1,000 2,500 4,500 3,500 23,000 20,000 20,000 20,000 25,875 25,000 11,963 20,650 6,500 12,000 12,000 12,000 12,000 12,000 12,000 12,000 12,000 12,000 12,000 12,000 12,000 12,000 12,000 12,000 12,000 13,000 14,000 15,000 16,500 17,000 18,000 19,000 10	210,000 360,000 235,673 94,000 207,920 277,016 90,000 90,000 150,000 210,000 270,000 130,000 389,920 270,000 130,000 389,920 270,000 130,000 780,000 780,000	1, 402 40,000 161,159 7,686 50,721 47,607 117,863 7,494 14 36,223 4,200 22,992 65,931 160 89,165	325 79 160 1,309 1,818 958 227 589 987 720 724 473 473 473 280 1,175 751 290 724 473 473 473 473 473 473 473 473 473 47	Per cent.  8  8  6  6  5  6  7  3,4,5  5,6  5  42,6  4  5  5  6  6  6  6  6  6  4  4  6  6  6  6  6

<sup>Instruction in the first two years of these courses is mainly given in the College of Arts and Sciences.
Included in collegiate classes.
Estimated.
Library destroyed by fire May 27, 1912.</sup> 

Graduates and students, by classes, at land-grant colleges for white students, 1912.

			Total.		1,800	2,267 6,974 977	435 168 759	5, 404	2,339 10,282 16,043	3,852 19,509 1,852 1,852	1,294	2, 633 1, 800	1,698 24,453	1,718 5,008 969
			Other depart-	ments.		3,494	7 920	361	2,658	936	173	230	3,536	2,301
		ses.	1	sion courses away from college.3		550 163 15	160	4,420	1,850 3,000	17,000		500	17, 500	645
		Exterior courses.		Farm- ers' week at college.	1,000	75		200	1,041	1,168	430	830		275 1,300 285
ri.	arts.	Exte		Correspondence.		362		004	175	161	62	493		
Students by classes.	College of agriculture and mechanic arts.			Total.2	810	3,175 827	273	423	3,583	1,587	723	810 810	1,698	1,219 762 548
dents l	and m		ses	Sum- mer.		91 61,981 6 94	48		82	39		156	924	189
Stu	culture		Short courses	Short or win- ter.		87 163 135		619	1,041	618 294	118	165	532	305
	e of agric	Interior courses.	Shor	1 to 2 year courses of col- lege grade			===	43		188 317	1 1	43		
	Colleg	nterior		Post grad- uate.	26	777		# [~ =	152	4.27	889	17 8	393	20 e
		I		Collegi- ate.	784	1, 138 1, 138 322	146	300	2,390 1,437	1,504	301	126 506 1 518	1,176	889 457 198
		Second- ary schools aby of agri- culture.				99	65	14	09		86		1,130	83
		Pre- para- tory.¹					18		59	263	Jou	75	129	324
		All rotal number since since other Total. Zation. p				7,270 7,270 492	327 542	563	382 7,726 4.268	2,910	2,002 782 1,706	368	1,844 8,592	4,615 168
						159 679 47	စ တွ	25	862 862 303	193	117 122	282	171	869 25
ates.						157 519 16	9	3 .0	515.82	948	56	5	51.7	16 416 8
Graduates.	1911-1912		Home	eco- nomics courses.		6			29	888	-		30	mm
	11		Me-	courses.	45	112	233	<b>4</b> 1	252	318	23,82	17	59	23
	1		A orticial.		55	- 1 - 2 - 2		- 52	4298	57.72	01 21	85	67	30 61 8
			State or Territory.		Alabama (Auburn)	Arkansas (Fayetteville) Califorina Colorado	Connecticut Delaware (Newark)	Georgia (Athens)	Idabo Illinois	Iowa Kansas	Louisiana (Baton Rouge) Maine.	Maryland (College Park) Massachusetts (Amherst) Massachusetts (Rotton)	Michigan Minnesota	Missouri (Columbia) Montana

6,953 368 595 672 508 26,706	1, 219 3, 216 13, 413 11, 788 2, 895	1,003 1,003 1,561 2,910	10,793 10,793 11,782 22,706	242, 954
2,742 3,198	1,924 345 234	399	161 433 767 1,203 3,572 3,572	32,685
1,781	300 2,000 9,485 8,122	436	9, 483 257 14, 958	106, 516
1,500 273 2,025	300	120 750 1,825 989	439 200 2,000	19,992
15	27.	154	47	33, 149
915 363 322 672 332 332 2,650	1,216 2,004 2,586 2,586 2,634	248 248 811 390 1,190	1,219 227 490 543 322 2,176 20	.53
223	32 124 59	1 1177	27 96 148	4,749
162 17 128 94 94 451	37 470 273 735 1,583 136	27 7 119	461 27 102 75 557	9,537
23	114	18	101	1,308
0 4 4 4 4	10 6 1 1 18 37	12	12 21 21 77	1,326
332 275 229 378 1,987	426 190 1,563 664 2,042	190 182 716 184 251 883	327 182 410 321 1,293 1,293	30, 532
76	169 881 56	123	419	4,022
88 162 168	344 246 142	83 83 85	32 93 10	3,226
4,517 480 487 867 125 125 125	4, 240 4, 240 1, 216 1, 216 1, 971	197 861 488 993	225 4,339 993 708 1,443 9,048	103, 736
44 44 44 66 88 821	52 26 501 67 126 271	17 92 31 136 97	100 100 109 88 795 22	8,370
318 23 17 34 4 4 490	0 9 9 33 8 27 35	9	570 14	4, 494
10	జాబ్ గా టెట్ట	3 108	12 13	427
51 188 252 235 235	32 108 21 21 207	8 10 10 72	23 44 20 133 133	2,260
	. 14 74 74 . 16 . 28	25 7 25 25	24 4 4 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1,200
Nebraska Newada. New Hampshire. New Jersey. New Mexico. New York. New York.	Raleigh). North Dakota Obito Oklahoma (Stillwater). Pennsylvania. Pennsylvania.	Rhode Island South Carolina South Dakota Temessee	Vermont Virginia. Washington West Virginia. Wisconsin	Total

Including schools of agriculture of high-school grade under the control of the institution.

2 Counting none twice.

3 Not including students' institutes.

4 This total includes not only those regularly enrolled in the institution, but in some cases many persons who have received limited instruction by correspondence.

6 Including students in other departments.

7 Including 53 students in college of engineering.

8 Including 12 certificates in 2-year courses.

Students, by courses, at land-grant colleges for white students in 1912.

																1
			14	Four-year.								Shorter	r.			
State or Territory.	Agri-	Horti-	, E	Veter-		House-	Engi-	Agri-	Horti-	Į.	Veter-	House-	Teachers' cours agriculture.	Teachers' course of agriculture.	Me-	Mili-
	cul- ture.1	cul- ture.	estry.	inary science.	Total.	econ- omy.	neer- ing.	cul- ture.1	cul- ture.	estry.	inary science.	econ- omy.	1 to 3 years.	Sum- mer school.	chanic arts.	tary tactics.
Alabama Arizona Arizona Arizona Arizona Arizona Colorado Colorado Colorado Connecticut Domnecticut Domnecticut Domnecticut Coorgia Hawaii Illinois Indiana Illinois I	114 88 88 88 88 88 88 88 88 88 88 88 88 88	35 8 8 8 8 8 8 10 10 10 7 7	8 8 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9	3 3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	252 252 252 252 252 253 254 254 254 255 255 255 255 255 255 255	232 232 232 201 101 478 178 179 9 9 9 124 178 178 178 178 178 178 178 178 178 178	272 832 1038 11038 11038 1258 2852 2852 2852 2852 2852 2852 285	207 207 50 50 60 60 60 60 60 60 60 60 60 6	6 6 6 6 10 10 10 10 10 10 10 10 10 10 10 10 10	п	12.0	28 28 119 28 14 14 14 15 19 28 28 28 29 29 29 29 29 29 29 29 29 29 29 29 29	1, 14	72. 44 0.00 44 0.00 66	3 2 5 6 12 8 14 15 15 15 15 15 15 15 15 15 15 15 15 15	202 202 202 203 203 203 203 203 203 203
New York. North Carolina. North Dakota Ohio. Oklahoma.	9-967 157 53 396 136	44	138	3 106 3 150	1,073 157 54 675 136	69 211 96	1,559 245 34 3624 142	451 136 337 124 519	14			42		33	45 218 6	1, 206 623

975	155	80 <del>4</del> 207	270	1,129	164	408		) F	19,954
8 8	Q	79.	:	19	:	15			541
	24		123				96		1,698
	> :		-	4			9	40	.188
103	9	7	. :	69	7	26	35	29	1,103
						13			84
98							:		19
			75			48	:		272
1,432	32	180	94	377	96	52	40	3 :	8,905
751	16	322	111	970	106	279	96	13	14,337
177	200	23	2	62	00	92	19.4	6	2,664
272 376	37	43	72	363 132	92	1881	36	12	9,974
						6	:		664
88 25			:			6			487
74			:			76			322
247	37	43	72	363	2.6	5 6 7 7	36	12	8,737
Jregon Pennsylvania Porto Bico	Shode Island	south Carolina South Dakota	l'ennessee.	rexas. Utah	ermont.	Irginia. /ashington	Vest Virginia	Wyoming	l'otal.

Unless otherwise classified this number usually includes students in horticulture, forestry, and veterinary science.

Counting none twice.

There-year course.

Including 18 students in 4-year course.

Including 2 students in dairying and animal husbandry.

Including 118 students in animal husbandry and 28 in dairy husbandry.

Including 118 students in sugar engineering (5 years).

Including 118 students in sugar engineering (5 years).

Including students in household economy.

4 Including teachers in collegiate department.

3 Certificate of proficiency.

<sup>2</sup> Normal classes.

1 Counting none twice.

General statistics and students at land-grant colleges for colored students in 1912.

		Total.	245 1132 1171 1171 1171 1172 1074 1074 1074 1074 1074 1074 1074 1074	8,495
	2450	de- part- ments.	206	296
ses.	arts.	Total.	245 132 171 171 268 307 268 136 401 359 192 1,315 1,669 320	7,899
Students by classes.	College of agriculture and mechanic arts	Sum- mer school.	48 38 38 38 38 38 38 38 38 38 38 38 38 38	1,051
udents	and n	Short or win- ter.	8 8	64
St	eultur	Post-strad-win-nate.	61	20
	e of agri	Colle- giate.	2 70 33 79 36 20 110 50 46 1114 2311 231 403 222	1,544
	Colleg	Pre- para- tory.	175 99 60 325 548 135 136 472 170 170 172 144 144 144 144 160 935 935	5,317
	Number of acres	and grounds.	182 20 20 250 86 86 86 104 118 325 48 118 320 48 118 320 1,490 1,060 1,060 1,77	5,335
ary.		ber of pam-	1,500 600 600 8,000 8,000 1,000 30,000 30,000 30,000 12,000 12,000	65,011
Library		ber of vol- umes.	9,200 1,000 8,000 8,000 2,000 6,000 1,776 1,670 2,600 8,703 30,703	74,901
ates.	Total	number since organi- zation.	1,384 235 101 149 224 294 291 138 371 564 122 21 21 21 21 21 21 21 21 21 21 21 21	7,458
Graduates.		21 .	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	131
		de- part- ments.	17 16 16 17 17 10 10 10	123
lty.	arts.	Total.1	8 8 9 4 7 1 2 8 4 1 8 4 1 8 4 1 8 4 1 8 1 8 1 8 1 8 1	351
Faculty	College of agriculture and mechanic arts.	Collegiate and special courses.	2 2 3 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	107
	College and n	Pre- para- tory classes.	2 13 13 13 14 14 14 14 16 10 10 10 10 10 10 10 10 10 10 10 10 10	280
	Date of estab- lish-	agricul- tural courses.	1882 1892 1890 1890 1890 1878 1878 1866 1890 1890 1890	
	Date of estab- lish-	ment of institu- tion.	1875 1892 1892 1887 1887 1880 1871 1871 1891 1891 1896	
	State or Deritory		Alabama (Normal).  Arkansas (Pine Biuli). Delawaro (Dover). Florida (Tallahassee). Georgia (Savamah). Kentukay (Frankfor). Marythad (Princess Ann). Mississippi (Alocan). North Carolina (Greens. Doro). Oklahoma (Langston). Oklahoma (Langston). South Carolina (Orange. burg). Flexas (Trairie View). Virgina (Hampton). West Virginia (Institute).	Total

Students, by courses, at land-grant colleges for colored students, in 1912.

	Military tactics.	87	32	146	110	50		219	417	536	2,448
	Millinery.	2		15		9 9				4	29
	Nursing.	000		20			Ξ	99	35		126
	Laundering.	12	18	11	10	919	103	10	1	93	529
	Cooking.	22	36	120	338	962	61	260	215	112	1,303
	Sewing.	88	24	125	22,9	106	103	232	290	261	1,711
	Plastering.	2		71		: :	: :	က	40	=	127
	.gnirolisT	19		322	:		26		20	31	225
	Harness making.								30	2	35
	Printing.	9	9	17	58	22			:	111	108
	Painting.	2		16		2 2	12		20	47	108
	Bricklaying.	10	9	71.	:		: :	84	40	31	217
	Wheelwrighting.	10		χ <b>ο</b>	91	9		7	20	20	126
	Broom making.				:			21	:		21
	Shoemaking.	73		40	:		19			- :	107
	Blacksmithing.	10	2	30	14	10.0	13	0,0	07	25	337
*2	Machine-shop work	9	10				17	3 8	40	18	123
	Carpentry	4.6	40	33	55	122	333	11	40	25	513
Teachers' courses in agriculture.	Summer schools.		73	2	:			32	- 400	84	627
Teac cours agricu	One to four years.	20	1 92	160	12	1				12	194
	Agriculture.	117	302	300	582	46	393	181	350 413	279	2,173
	State or Territory.	Alabama (Normal) Arkansas (Pine Bluff).	Delaware (Dover) Florida (Tallahassee)	Georgia (Sayannah)	Kentucky (Frankfort).  Louisiana (New Orleans).	Maryland (Princess Anne)	Missouri (Jefferson City)	Oklahoma (Langston)	South Carolina (Orangeburg) Texas (Prairie View)	Virginia (Hampton). West Virginia (Institute)	Total.

Value of permanent funds and equipment of land-grant colleges, 1912.

	Land-grant fund of 1862.	Other land- grant funds.	Other endowment funds.	Land grant of 1862 still unsold.	Farms and ground owned by the institution.	Buildings.	Scientific apparatus, machinery, and furniture.	Library.	Live stock.	Total.
Alabama (Aubum)  Alabama (Normal)  Arizona  California  California  California  California  California  Colorado  Connecticut  Delaware (Nover)  Florida (Gamesville)  Florida (Tallahassee)  Georgia (Savamah)  Hawaii  Idaho  Illinois  Indiana  Kentucky (Lexington)  Kentucky (Frankott)  Louisiana (Baton Rouge)  Louisiana (Baton Rouge)  Louisiana (Baton Rouge)  Maryland (College Park)  Maryland (College Park)  Maryland (Trincess Anne)  Maryland (Trincess Anne)  Maryland (Trincess Anne)  Maryland (Trincess Anne)  Massachusetts (Boston)  Michigan  Minescal  Mississippi (Agricultural College)  Mississippi (Aloom)  Mississippi (Agricultural College)  Mississippi (Agricultural College)	\$253,500.00 130,000.00 83,000.00 153,000.00	\$22, 637.50 154, 712.27 65, 850.00 65, 850.00 136, 000.00 136, 000.00 222, 000.00 225, 000.00 225, 000.00 225, 000.00	\$31,000.00 10,500.00 10,500.00 61,000.00 40,000.00 142,000.00 142,000.00 150,000.00 150,000.00 150,000.00 150,000.00 150,000.00 150,000.00 150,000.00 150,000.00 150,000.00	\$11, 818, 27 125, 000, 00 701, 420, 00 9, 607, 50 76, 000, 00 750, 000, 00 1, 178, 630, 00	\$\$\text{\$\ext{\$\text{\$\e	\$355,000.00 290,309.00 291,309.89 290,000.00	\$\frac{877}{28},000.00 \$\frac{877}{28},000.00 \$\frac{150}{150},000.00 \$\frac{150}{150},000.00 \$\frac{132}{250},000.00 \$\frac{90}{25},000.00 \$\frac{90}{25},000.00 \$\frac{25}{25},000.00 \$\frac{25}{25}	\$77, 000, 00  \$77, 000, 00  \$7,	\$5,076.33 1,100.00 9,300.00 6,000.00 11,000.00	\$888, 319, 89 175, 537, 50 289, 319, 89 701, 000, 00 701, 000, 00 1, 673, 500, 00 42, 000, 00 42, 000, 00 42, 000, 00 42, 000, 00 43, 000, 00 44, 500, 00 45, 500, 00 46, 63, 64, 63 1, 64, 63, 64, 63 1, 64, 63, 64, 63 1, 166, 484, 43 1, 1892, 346, 30 1, 166, 484, 43 1, 1892, 346, 30 1, 166, 484, 43 1, 167, 167, 167, 167, 167, 167, 167, 16

706. 797.	1,808,197.59 5,458,121.77 659,771.08	204. 500.	205. 204. 204.	822. 513.	265. 524. 842.	317. 406. 604.	098. 153.	125, 757, 493.34
16, 405.	15,000.00 22,146.00 18,532.00	10,900. 3,500.	6,640. 19,607. 5,000.	10,408.	16,000.00 8,000.00 12,491.00	22, 661.00	31,636.10 8,000.00	796, 959. 66
792, 501. 60 19, 800. 00	28,500.00 301,810.00 37,771.08	2, 494, 30 50, 000, 00 99, 500, 00 4, 000, 00	35, 025. 36 31, 927. 00 450. 00	40,000.00	988	12, 500, 00 46, 695, 00 45, 500, 00	813.	5, 636, 297. 92
968. 531.	135,000.00 699,036.05 198,468.00	300.00	307. 757. 000.	223.	000 339.	185,000.00 179,177.10 90,000.00	393.	12, 594, 728. 25
478. 750.	1, 902, 125, 00 1, 355, 000, 00	98.59	854 854 800 800 800 800 800 800 800 800 800 80	86138	555	92209	888	44, 459, 391. 12
351.	1,583,000.00	3888	8555 000.05	240.	2000	0000	361.	22, 023, 266. 60
, ,					49,984.94	1,318,637.80	891, 653.30	5, 165, 209. 81
8, 834, 829.38	275, 455. 15	89, 709. 50		4,000.00	1,054,524.27		129, 493. 78	18, 507, 183.37
	150,373.07		136 738 19	5,000.00		481, 984. 73	232, 796. 50 6, 000. 00	3, 368, 558. 07
688, 576. 12 125, 000. 00	1,047,697.69 524,176.50	196,519.00 427,290.50	50,000.00 95,900.00 5,754.00	400,000.00	3000	172, 156. 00 255, 955. 37 115, 104. 17	303, 594. 61 25, 500. 00	13, 205, 898.64
New York. North Carolina (West Raleigh)	North Dakota. Ohio Oklahoma (Stillwater)	Oklahoma (Langston). Oregon. Pennsylvania. Porto Rico.	Rhode Island. South Carolina (Clemson College) South Carolina (Orangeburg)	Tennessee. Tennessee. Texas (College Station).	Texas (Talle View) Utah. Vermont. Virginia (Blacksburg)	Virginia (Hampton). Washington. West Virginia (Morgantown).	West virginia (misticute). Wisconsin. Wyoming.	Total

 $^{\rm I}$  Including buildings, live stock, scientific apparatus, machinery, and furniture.  $^{\rm 2}$  Including value of live stock.

<sup>3</sup> Including experiment station lands.
<sup>4</sup> Library destroyed by fire May 27, 1912.

### Revenue of land-grant colleges

		Federal ai	d.	State	aid.
State or Territory.	Interest on land grant of 1862.	Interest on other land grants.	Appropriation acts of 1890 and 1907.	Interest on endow- ment or regular appro- priations.	Appropriation for current expenses
Alabama (Auburn)	\$90 980 00		<b>9</b> 97 269 50	\$1,160.00	\$40,000.
Alabama (Normal)			22,637,50	\$1,160.00 4,000.00	
Alabama (Normal) Arizona			50,000,00	1,000,00	38,470.
Arizona. Arkansas (Fayetteville). Arkansas (Pine Bluff). California. Colorado. Connecticut. Deleware (Newark). Delaware (Dover). Florida (Gainesville) Florida (Tallahassee). Georgia (Athens). Georgia (Savannah). Hawaii. Idaho. Illinois.	3,480.00		50,000.00	43,710.78 85,843.11 800.00	38,470. 72,380. 9,000.
Arkansas (Pine Bluff)			13,636.36		9,000.
California	42,675.31	\$9,016.79	50,000.00	43,710.78	794,331. 30,580. 25,000. 7,500.
Connecticut	6 750 00		50,000.00	85,845.11	25,000
Deleware (Newark)	4,980,00		40,000.00		7,500.
Delaware (Dover)	-,,000,00		10,000.00		
Florida (Gainesville)	7,690.00	1,975.50	25,000.00		22,385. 7,500.
Florida (Tallahassee)			25,000.00		7,500.
Georgia (Athens)	16,954.14		33,333.34		
Georgia (Savaiman)			10,000.00	800.00	10.000
Idaho	92 528 20	38 033 83	50,000.00		10,000.
Illinois	32,464,32	38, 933. 83	50,000.00		575,000.
			50,000.00		40,000. 575,000. 179,504.
Indiana. Lowa Kansas Kentucky (Lexington) Kentucky (Frankfort) Louisiana (Baton Rouge) Louisiana (New Orleans) Maine Mondent (College Ports)	35,018.73		50,000.00		
Kansas.	24,481.91		50,000.00		
Kentucky (Lexington)	8,644.50		42,750.00		135,000. 13,000. 100,000.
Louisiana (Raton Rouge)	0 115 60	5 440 00	27 685 81		100,000.
Louisiana (New Orleans)	3, 110.03	5,440.00	22, 314, 16		10,000.
Maine	5,915.00		50,000.00		10,000.
Maryland (College Park)	5,797.18		50,000.00		16,000.
Maryland (Orinees Fark). Maryland (Princess Anne). Massachusetts (Amherst). Massachusetts (Boston). Michigan. Minnesota.			823.51		
Massachusetts (Amherst)	7,300.00		30,000.00		160, 250.
Mishigan	70 965 99		10,000.07	29,000.00	999 900
Minnesota	23 861 89	33 667 28	50,000.00	• • • • • • • • • • • • • • • • • • • •	228, 800. 285, 792.
Mississippi (Agricultural College).	5,914,61	8, 472, 75	25,817.98		200, 102.
Mississippi (Agricultural College) Mississippi (Alcorn) Missosippi (Alcorn) Missouri (Columbia) Missouri (Jefferson City) Montana Nebraska Nevada New Hampshire New Jersey New Mexico New York North Carolina (West Raleigh) North Carolina (Greensboro) North Dakota Ohio Oklahoma (Stillwater) Oklahoma (Langston) Oregon Pennsylvania Porto Rico Rhode Island South Carolina (Clemson College)	6,814.50	33,667.28 8,472.75 5,777.77	24, 182, 02		10,800.
Missouri (Columbia)	17,994.00		46,875.00	45, 455, 00	10,800. 495,393.
Missouri (Jefferson City)	205 040 0				
Nobrocko	3 25, 048.08	14 022 05	50,000.00	260 102 00	25,401.
Nevada	3 914 09	14,033.05 1,519.72	50,000.00	41 030 02	88 065
New Hampshire	4,800,00	1,010.12	50,000.00	41,000.02	10, 778.
New Jersey	5,800.00		50,000.00		50, 476.
New Mexico		1,082.84	50,000.00		16,000.
New York	34,428.80		50,000.00		297, 425.
North Carolina (West Raieign)	7,500.00	*******	33,500.00		83,000.
North Dakota	60 110 18		50,000.00	56 991 09	25,000.
Ohio	31, 450, 59	7, 739, 97	50,000.00	397, 526, 57	57, 853
Oklahoma (Stillwater)	28,500.00		45,000.00		100,000.
Oklahoma (Langston)		7,739.97	5,000.00		36,000.
Oregon	10,493.11		50,000.00		150,000.
Pennsylvania	31,020.00		50,000.00		538, 519.
Rhode Island	2 500 00		50,000.00		95,000
South Carolina (Clemson College).	5,754,00		25,000.00		25,000.
South Carolina (Clemson College). South Carolina (Orangeburg). South Dakota	5,754.00		25,000.00		7.500.
South Dakota		30,626.28	50,000.00		53,000.
	23,960.00	30, 626, 28 250, 00	50,000.00		100 00-
Texas (College Station)	6,500.00		50,000.00		199,697.
Utah	11 813 06		50,000,00		65, 838
Vermont	8, 130, 00		50,000.00		27.500.
Virginia (Blacksburg)	20,658.72		33,333.33		58,333.
Tennessee. Texas (College Station). Texas (Prairie View). Utah. Vermont Virginia (Blacksburg). Virginia (Hampton). Washington	10,329.36		16,667.67	112,339.13	. 1,730.
Washington	6 100 00	27,617.35	50,000.00		242,500.
West Virginia (Institute)	0, 100, 00	27,617.35	10,000.00		20, 500
West Virginia (Morgantown) West Virginia (Institute) Wisconsin		12,007.45	50,000,00	45, 455, 00 360, 103, 00 41, 039, 02 56, 221, 03 397, 526, 57 112, 339, 13 1, 177, 197, 64	1.106.020
Wyoming.	7,500,56		50,000.00		80, 911.
Total	091 507 51	100 100 50	2 520 502 54	1 177 107 64	C 007 410

The total appropriation divided, \$15,000, going to the State station at New Haven.
 Including appropriation for experiment station.
 Including interest on other land grants.

for year ended June 30, 1912.

State aid—	continued.	Income	Fees a	nd all other s	ources.		United	
Appropriation for Farmers' Institutes and extension work.	Appropriations for income of plant.	from endowment other than Federal or State grants.	Student fees.	Private bene- factions.	Miscel- laneous.	Total.	States ap- propriations for experi- ment stations (acts of 1887 and 1906).	
\$5,000.00		\$50.00	\$13,723.85 700.33 23,723.16	\$15,000.00	\$21,162.90 20,080.51	\$128,739:25 62 418 34	\$30,000.00	
4,000.00	\$40,500.00		11,120.00	40,000.00	\$21,162.90 20,080.51 4,769.27 500.00	62, 418.34 157, 462.87 181, 480.00	30,000,00 29,988.00	
15,000.00	267, 362. 23	91,357.71	135.00 155,515.82	566, 028.38	22, 771.36 164, 590.19 38, 873.27 47, 968.09 3, 250.00	181, 480, 00 45, 542, 72 2, 199, 588, 55 221, 475, 58 217, 809, 09 80, 193, 85 18, 397, 00 147, 733, 21 60, 900, 01 116, 989, 68 17, 466, 66 137, 157, 22 216, 002, 68 2, 197, 273, 74 454, 228, 75 344, 508, 91 304, 305, 45 306, 394, 50 29, 535, 68 198, 410, 64	30,000.00 30,000.00 115,000.00	1
2,500.00 2,500.00 4,500.00	33,000.00 10,000.00	7, 260.00	45,331.00 9,963.85 7,158.00		47, 968, 09 3, 250, 00	217, 809, 09 80, 193, 85	1 15,000.00 30,000.00	
7,500.00			7,158.00 24,873.73 12,000.00	200.00 1,500.00	1,808.98	18,397.00 147,733.21	30,000,00	1
	15,000.00 50,233.34	500,00	12,000.00 2,834.00	4,662.50	900,00 8,972.36	60,900.00 116,989.68	30,000.00	1
12,000.00	75,000.00 51,000.00 1,207,400.00		190.00 825.00		1.967.22	137, 157, 22 216, 002, 68	30,000.00	11 11 11 11 11 11 11 11 11 11 11 11 11
27 500 00			04.000.00		715.65 91,295.41 115,871.18	2,197,273.78 454,228.75	30,000.00 30,000.00 29,938.04 30,000.00	1
50,000.00 35,000.00 280,000.00	48, 247, 75 79, 000, 00		83, 787. 92	2,362.99 40,000.00	75,091.52	344, 508.91 304, 305.45	30,000.00 30,000.00 30,000.00	2
280,000.00			8, 285. 08 15, 602. 70		1 000 00	29, 535, 08 198, 410, 64	30,000.00	1 2
	750.00 101,500.00		41, 274. 33 32, 565. 39		942.19 39,641.60	34, 006. 35 238, 330. 93	30,000.00	64
6,000.00 17,500.00		1	6 104 00	100.00	2,145,00	9, 262. 51	30,000.00	
17,500.00			348,894.14 34,387.07		121, 335. 71 76, 544, 08	521, 203. 20 459, 996, 47	30,000.00	4 6 4
11,250.00	793, 986, 94 41, 900, 00		306, 415, 02 97, 332, 09	250.00	2,145,00 43,924,94 121,335,71 76,544,08 43,652,83 64,768,52 2,295,31 31,143,32 16,000,00	29, 535. 08 198, 410. 64 34, 006. 35 238, 330. 93 110, 362. 57 9, 262. 51 412, 981. 50 521, 203. 20 459, 996. 47 1, 537, 376. 67 255, 705. 95 72, 747. 61	30,000.00 30,000.00	0000
3,125.00	96, 700.00 3, 000.00	800.00	76, 408. 27 8 750 00	250.00	2,295,31 $31,143,32$ $16,000,00$	810,768.59	30,000.00	
10,000.00 17,500.00	21,000.00 199,000.00				4103 409 18	157, 432.83 864, 875.01	30,000.00 30,000.00	0.00
3,250.00	40,000,00 6,926.63	6,000.00 35,261.08 35,783.34	18, 943. 64 9, 955. 07 27, 937. 39	1,500.00	14, 786, 43 39, 759, 15 59, 643, 04	265, 767, 90 160, 730, 42	28, 081. 58 30, 000. 00	4.0 0.0 0.0
28,726.20		l .	4,387.06	40,050.52	9,128.77	30, 875, 00 157, 432, 83 864, 875, 01 265, 767, 90 160, 730, 42 284, 886, 79 80, 598, 67 3, 023, 754, 74 47, 903, 33 251, 631, 90 785, 943, 16	30,000.00 30,000.00 28,081.58 30,000.00 30,000.00 30,000.00 5 27,000.00 30,000.00	
	151,848.14 50,000.00 1,875.00		68,171.92 9,309.37		9, 128. 77 220, 547. 02 56, 318. 52 7, 718. 96 12, 658. 01	298, 490, 44 47, 903, 33	30,000.00	1 3
33,567.19	171,000.00	16,520.19	38,702.68 135,813.74	1,307,111.11 787.50	12,658.01 54,684.39 12,000.00	251, 631, 90 785, 943, 16 361, 500, 00 41, 201, 50 552, 818, 70 605, 596, 54 111, 665, 00 129, 853, 65 116, 121, 08 48, 361, 47 176, 027, 47 182, 036, 64	30,000.00 30,000.00 30,000.00	4
2,500.00			22,389,32		201.50 43.936.27	41,201.50 552,818.70	30,000.00	
					43,936.27 20,659.67	695,596.54 111,665.00	30,000.00 30,000.00 30,000.00 30,000.00 29,900.00	
2,000.00	0 000 00		34,811.25 70,417.53	3,512.36	12,542.31 11,437.19 1,107.47	129, 853, 56 116, 121, 08	30,090.00 29,900.00	
51, 139. 29	4,000.00	1,498,55	8,586.49 39,410.23 147,057.26	250.00	29,814.70 15,528.57 10,000.00	176,027.47 182,036.64	30,000.00 30,000.00	
9,000.00	36,000.00		147,007.20			182,036.64 618,504.42 80,500.00	30,000.00	1 4
15,000.00 4,350.00	90,000.00	30.067.66	9,778.50 63,501.48 78.260 12	56,462.31	6, 125, 61 24, 064, 28 64, 374, 00	248,556.84 259,725.73 265.309.50	30,000.00 30,000.00 28,635.51	
	(6)		9,778.50 63,501.48 78,260.12 107,513.17 20,748.00 17,789.80 9,140.18 344,392.69 3,093.30	288, 906. 75	6, 125. 61 24, 064. 28 64, 374. 00 678. 07 32, 155. 09	80,500.00 248,556.84 259,725.73 265,309.50 538,164.15 387,455.96 228,889.80 47,932.80	30,000.00 29,250.00	1 1
5,000.00		0 400 10	17,789.80 9,140.18	1F F00 C		228, 889. 80 47, 932. 80		1 (
161,000.00	7,500.00 285,369.04 3,250.01	6,409.10	344,392.69	15,763.29 500.00	792, 62 172, 175, 42 6, 183, 98	47, 932, 80 2, 165, 863, 93 151, 439, 01	30,000.00 28,850.59	
626, 407. 68	4,647,746.97	660,779.00	3,654,050.11		2,296,065.41	25, 967, 130. 45	1,476,643.72	

<sup>&</sup>lt;sup>4</sup> Including \$24,715 for investigation of plant and insect pests, production of hog-cholera serum, and other special activities.

<sup>6</sup> The total appropriation divided, \$3,000 going to the State station at Geneva.

<sup>6</sup> Included in current expenses.

Additions to equipment of land-grant colleges, 1912.

State or Territory.	Permanent endowment.	Buildings.	Library.	Apparatus.	Machinery.	Live stock.	Miscella- neous.	Total.
Alabama (Auburn). Alabama (Normal). Arfaonsa (Payetteville).		\$4,151.90 19,000.00 5,918.45	\$2,387.39 200.00 4,160.03 500.00	\$1,895.88 600.00 8,272.11 1,500.00	\$360.00 486.00 250.00	\$500.00 1,998.80 1,500.00	\$250.00 161.45	\$8,935.17 20,410.00 20,996.84 3,750.00
Arkansas (Pine Bluff) California	\$450,943.94	247, 813.39	30,818.85	1 64, 001.57		6,379.90	150, 830. 39	950, 788. 04
Constant Constant Connecticut Delaware (Dowark).	2,500.00	39, 819. 58	1,300.00	1, 716. 40 4, 000. 00	1,534.60	437.40	1,033.17	44, 815. 28 19, 550. 00
Florida (Gainesville) Florida (Tallahassee) Georgia (Athors).		23,000.00 7,905.12	1,500.00 203.80 2,655.49	5,000.00 1,948.67 8,337.46	500.00 556.55 1,500.00	80.25 71.00	3,000.00 1,000.00 940.27 2,733.39	2,700.00 63,000.00 26,729.54 23,202.46
Proofs (vaviment) Havaii Idaho Illinois	60.00	66,500.00 47,585.46 848,500.00	3, 737.00 2, 814.98 24,000.00	4,272.95 19,510.00	6, 427.00 4, 526.54 16, 944.51	801.00 4,549.61 9,563.00	7,242.00 5,619.97 10,000.00	84, 707.00 69, 369.51 928, 577.51
formans Kansas Kentucky (Lexington)	40,000.00	174,073.83 50,000.00	2,000.00 11,500.00 3,500.00 1,500.00	32, 294. 28 3, 300. 00 3, 000. 00	25, 600.00 1,000.00	3,000.00 9,838.06 14,936.00 1,000.00	21,452.71 7,000.00 1,500.00	249, 158. 88 104, 336. 00 48, 000. 00
Aentucky (Frankfort). Louisiana (Baton Rouge). Louisiana (New Orleans).		4,942.68	1,588.96	50.00 4,437.05 300.00 6.976.56	1,271.60	2,465.00		4, 265. 25 18, 839. 26 1, 100. 00 46, 474. 03
Maryland (('Oliege Park). Maryland (Princes Anne). Massechusetts (Amherst). Massechusetts (Boston).		200.00	2 380.00	5,000.00 260.00 23,109.00	5,000.00	2,500.00	1,000.00 1,500.00 14,305.00	14,000.00 4,277.00 113,714.00
Michigan. Missespip i (Agricultural College). Mississippi (Agricultural). Mississippi (Agricultural).	57,337.15	1,080,142.00 42,411.00 112,000.00	34,000.00 3,857.79 17,499.00	16,000.00 11,399.13 43,958.00	11,000.00 10,671.49 2,092.00	6,000.00 17,688.94 1,500.00 7,289.00	21,399.23 16,427.00	1, 248, 479.15 107, 427.58 1, 500.00 205, 265.00
Missourt (Jefterson (11y) Mebraska Nebraska New Hampshire New Hampshire New Hampshire New Mexico New Hampshire New Mexico New Alexico New Alexico New Alexico	9,750.00 150,000.00 26,699.35 786,297.00	21,000.00 185,000.00 40,000.00 8,500.00 5,491.21 1,800.00 374,386.83	1,500.00 13,987.00 5,133.34 2,500.00 2,849.30 532.05 21,104.20	5,000.00 10,000.00 7,496.02 5,300.00 2,215.05 300.00 65,584.89	500.00 12,282.03 300.00 1,053.74 2,283.00	2, 128, 55 3, 500, 00 3, 500, 00 837, 50 695, 00	2,000.00 10,000.00 2,800.00 337.50	42, 750.00 210, 987.00 227, 039.94 22, 900.00 38, 883.65 5, 630.05 1, 247, 372.98 97, 634.99
North Carolina (Greensboro)		1,600.00	400.68	351.00	172.00	185.00	980.00	688

16, 761.84 248, 137.27 50, 243.16 1, 800.00	239, 581, 99 50, 450, 00 63, 000, 00	5, 401.99 67, 493.27	20,036.47 20,036.47 274,500.00 6,000.00	72, 176, 25 75, 350, 21 7, 750, 00	198, 058. 02 116, 241. 60	8, 757. 00 335, 005. 46 30, 782. 55	8,238,161.87
247.88 478.80 800.00				4, 148, 43		8, 757.00 24, 680.22 1, 782.59	438, 721, 40 8,
2,579.36 2,146.00 2,842.00		233.30 1,672.40	3, 025. 00 4, 000. 00	1,822.87	2,928.35	5, 199. 28 1, 081. 13	141, 412. 15
1,822.64 16,548.94 3,479.97	35, 683. 93	650.30 13,360.24	1, 735. 41 55, 000. 00	713.96	10, 184.13	4, 439.08 1, 070.95	270, 547. 61
2,968.54 20,140.00 3,410.24 1,000.00	56, 582. 40 450. 00	3, 535. 44	2, 685. 03 10, 500. 00	3,589.07 1 4,459.30 2,500.00	3 7, 500. 00 20, 958. 40	39, 104. 83 12, 049. 78	573, 186. 90
2,143,42 23,491.54 1,032.15	7, 494. 12	983.25 1,177.05	400.00 2,337.79	1,901.92	750.00 6,493.46	25, 295. 67 2, 890. 14	283, 725, 62
169, 125. 00 30, 000. 00	116, 564. 04 50, 000. 00 63, 000. 00	51, 283.58	4,000.00 4,875.30 200,000.00	60,000.00 7,661.95	25,000.00 34,566.61	229, 935. 99 11, 907. 96	4, 721, 467. 79
16, 685. 79				60, 044. 22	164, 589. 02 31, 843. 48	6,350.39	1,809,100.40
North Dakota. Ohio Oklahoma (Sillwater) Oklahoma (Lampston)	Oregon Pennsylvania Pennsylvania	Rhode Island South Carolina (Clemson College). South Carolina (Clemson House)	South Catolina (Viangeous b.) Tennessee Teras (College Station).	Texts (Taille Vew) Utah Vermon (Vermon Pleydower)	v nginia (Batasayung) Viginia (Hampton). Washington Washington (Moseoutoun)	West Virginia (Institute). Wisconsin. Wyoming.	Total

<sup>1</sup> Including machinery. <sup>2</sup> This amount includes money spent for textbooks.

<sup>3</sup> Including machinery and miscellaneous equipment.

Disbursements from the United States Treasury to the States and Territories of the appropriations in aid of colleges of agriculture and the mechanic arts under the acts of Congress approved Aug. 30, 1890, and Mar. 4, 1907.

	1913 3	6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.6.
	1911	######################################
	1910	
	1909	68888888888888888888888888888888888888
	1908	600 000 000 000 000 000 000 000 000 000
Ţ	1900 2	68888888888888888888888888888888888888
For the fiscal year ending June 30–	1899	######################################
ıl year end	1898	88888888888888888888888888888888888888
or the fises	1897	88888888888888888888888888888888888888
स	1896	68888888888888888888888888888888888888
	1895	00000000000000000000000000000000000000
	1894	813 913 913 913 913 913 913 913 9
	1893	
	1892	17, 900 17,
	1891	5. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.
	1890	高
(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	State of Territory.	Alabama. Arizona Arizona Arizona Arizona Arizona Californiu Coloradio Connectient Delaware Florida Georgia Maines Massachusetts Manneson Massachusetts Manneson Massachusetts Manneson Massachusetts Massachusetts Manneson Oregon

50,000 50,000 50,000 50,000 50,000 50,000 50,000	2,500,000
45,000 45,000 45,000 45,000 45,000 45,000 45,000	2,250,000
40,000 40,000 40,000 40,000 40,000 40,000 40,000 40,000	2,000,000
88888888888888888888888888888888888888	1,750,000
88,50,000 000,000 000,000 000,000 000,000 000,000 000,000 000,000	1,440,000
8	1,200,000
24, 000 24, 000 24, 000 24, 000 24, 000 24, 000 24, 000 24, 000	1,152,000
8,8,8,8,8,8,8,8,8,8,8,8,8,8,8,8,8,8,8,	1,104,000
2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,	1,056,000
######################################	1,008,000
28,28,28,28,28,28,28,28,28,28,28,28,28,2	960,000
19,000 19,000 19,000 19,000 19,000 19,000 19,000 19,000	912,000
18,000 18,000 18,000 18,000 18,000 18,000 18,000 18,000 18,000	864,000
17,000 17,000 17,000 17,000 17,000 17,000 17,000 17,000 17,000 17,000	782,000
16,000 16,000 16,000 16,000 16,000 16,000 16,000 16,000	704,000
15,000 15,000 15,000 15,000 15,000 15,000 15,000 15,000	000,099
Tennessee. Texas. Utah. Vermont. Virginia. Washington. West Virginia. Wisconsin.	Total

<sup>1</sup> From the annual statement of the Commissioner of Education to the Secretary of the Interior, 1911.

\*For each of the years ended June 30, 1901, 1903, 1903, 1904, 1905, 1906, and 1907 the sum of \$25,000 was paid to each of the 48 States and Territories included in this tabular statement, the total amount disbursed for each of the said years being \$1,200,000.

\*The appropriation for 1912 was the same as the appropriation for 1913.

# STATISTICS OF AGRICULTURAL

General

	Station.	Location.	Director.	Date of original organization.	Date of organization under Hatch Act.
1	Alabama (College)	Auburn	J. F. Duggar	Feb. —,1883	Feb. 24,1888
2	Alabama (Canebrake).	Uniontown			Apr. 1,1888
3	Alabama	Tucson	G. W. Carver  R. H. Forbes		1889
5	Arkansas	Fayetteville	C. F. Adams		1887
6	California	Berkeley	E. J. Wickson	1875	Mar. —,1888
7	Colorado	Fort Collins	C. P. Gillette	•••••	Feb. 29,1888
8	Connecticut (State)	New Haven	E. H. Jenkins	Oct. 1,1875	May 18,1887
9	Connecticut (Storrs)	Storrs	L. A. Clinton	•••••	May 18, 1887
10	Delaware	Newark	Harry Hayward P. H. Rolfs		Feb. 21,1888
12	Georgia	Experiment	M. V. Calvin		July 1,1889
13	Idaho	Moscow	W. L. Carlyle		Feb. 26, 1892
14	Illinois	Urbana	E. Davenport	•••••	Mar. 21,1888
15	Indiana	Lafayette	Arthur Goss	1885	Jan. —, 1888
16	Iowa	Ames	C. F. Curtiss		Feb. 17,1888

## EXPERIMENT STATIONS.

statistics, 1912.

Num- ber on	Num- ber of teach-	Number of persons on staff who assist	durin	cations g fiscal 1912.	Num- ber of names on	Principal lines of work.	
staff.	ers on staff.	in farmers' institutes.	Num- ber.	Pages.	mail- ing list.		
32	13	20	15	417	23,000	Field experiments; cooperative experiments with farmers; horticulture; plant breeding; soil improvement; feeding experiments; entomology; diseases of plants and animals; analyses of fertilizers.	1
1						Soilimprovement; field experiments; plant breed-	2
21	19	21	3		1,600	ing; diseases of plants. Field experiments; horticulture; plant breeding; diseases of plants; animal industry; poultry investigations; dairying.	3
12	1	10	3	198	6,500	Botany; field experiments; improvement of ranges; horticulture, including olive products and date-palm culture; sheep-breeding experi- ments; plant breeding; underground develop- ment; dry farming.	4
17	10	6	10	123	22,000	Chemistry, soil physics; field experiments; horti- culture; plant breeding; diseases of plants; ani- mal husbandry and pathology; feeding and breeding experiments; entomology; nursery in-	5
60	25	12	22	814	11,928	spection; dairying; poultry experiments. Chemistry; soils; bacteriology; fertilizer control; field experiments; horticulture, viticulture, and zymology; botany; meteorology; animal husbandry; entomology; dairying; poultry culture; drainage and irrigation; silviculture; reclamations illustrated and interest of the control of the contro	6
26	12	15	9	560	11,575	tion of alkalilands; animal and plant pathology; nutrition investigations. Chemistry; agronomy; horticulture; animal hus- bandry; horse breeding; animal diseases; potato diseases; alfalfa breeding; entomology; bacteri-	7
19		5	7	568	9,000	ology; irrigation.  Chemistry; analysis and inspection of fertilizers, foods, drugs, and feeding stuffs; inspection of Babcock-test apparatus; nurseries; apiaries; diseases of plants; plant selection and breeding; seed testing; forestry; field experiments; ento-	8
13	8	7	2	601	10,000	mology; investigation of vegetable proteids.  Dairy and soil bacteriology; field experiments; horticulture; feeding and breeding experiments; poultry experiments and diseases; dairying, in-	9
13	8	7	4	134	8,000	eluding soft-cheese manufacture; embryology. Chemistry; field experiments; horticulture; dis-	10
17		1	5	47,640	17,000	eases of plants and animals; animal husbandry. Chemistry; soils; field experiments; horticulture; plant physiology; diseases of plants; feeding ex-	11
8			5	140	12,200	periments; entomology; plant breeding. Chemistry; field experiments; bacteriology; horti- culture; plant breeding; plant and animal dis- eases; entomology; feeding experiments; dairy- ing.	12
26	10	9	3	153	5,000	Chemistry; bacteriology; botany; field experi- ments; horticulture; plant breeding, plant pa- thology, and diseases; animal husbandry; irri- gation; dairying; dry farming; wheat investiga-	13
70	48	8	18	400	23,000	tions; soils and soil physics. Soil chemistry; soil physics; bacteriology; pot and field experiments; horticulture; plant breeding; animal husbandry; diseases of plants and ani- mals; dairying.	14
52	14	15	21	828	45, 556	Chemistry; soils; field experiments; feeding experiments; horticulture; plant breeding; diseases of plants and animals; entomology; dairying; feeding stuff and fertilizer control; agricultural extension work.	15
40	16		11	276	20,000	tension work.  Chemistry; botany; soils; field experiments; horticulture; plant breeding; forestry; diseases of plants; animal husbandry; poultry investigations; entomology; dairying; rural engineering; good-roads investigations; bacteriology; veterinary science.	16

General statistics,

	Station.	Location.	Director.	Date of original organization.	Date of organization under Hatch Act.
17	Kansas	Manhattan	E. II. Webster		Feb. 8,1888
18	Kentucky	Lexington	M. A. Scovell	Sept. —,1885	Арг. —,1888
19 20 21	Louisiana (Rice) Louisiana (Sugar) Louisiana (State)	Crowley New Orleans Baton Rouge		Sept. —,1885 Apr. —,1886	
22	Louisiana (North)	Calhoun	W. R. Dodson	May,1887	
<b>2</b> 3	Maine	Orono	C. D. Woods	Mar,1885	Oct. 1,1887
24 25	Maryland  Massachusetts	College Park	H. J. Patterson	1888	Apr. —,1888
26	Michigan	East Lansing	R. S. Shaw		Feb. 26,1888
27	Minnesota	St. Anthony Park, St. Paul.	A. F. Woods	Mar. 7,1885	1888
28	Mississippi	Agricultural College	E. R. Lloyd		Jan. 27, 1888
29	Missouri (College)	Columbia	F. B. Mumford		Jan. —, 1888
30 31	Missouri (Fruit) Montana	Mountain Grove Boseman	Paul Evans F. B. Linfield	Feb. 1,1900	July 1, 1893
32	Nebraska	Lineoln	E. A. Burnett	Dec. 16, 1884	June 13, 1887

 $<sup>^{\</sup>rm 1}$  In 1882 the State organized a station here and  $\,$  maintained it until June 18, 1895, when it was combined with the Hatch Station at the same place.

# 1912—Continued.

Num- ber on	Num- ber of teach-	of on staff	persons during fisc on staff year 1912.		Num- ber of names on	of
staff.	ers on staff.	in farmers' institutes.	Num- ber.	Pages.	mail- ing list.	
61	43	37	16	626	20, 976	Soils; inspection of feeding stuffs and fertilizer control; horticulture; plant breeding; forestry; field experiments; feeding and digesting experiments; milling and baking tests; correlation of characteristics of wheat; poultry experiments; diseases of animals; hog-cholera serum; entomology; dairying; extermination of prairie dogs and gophers; irrigation; veterinary experiments
34	6	. 5	14	899	16,000	diseases of the horse. Chemistry; soils; bacteriology; inspection of fertilizers, foods, drugs, feeding stuffs, seeds, or chards, and nurseries; field experiments; horticulture; plant breeding; animal husbandry; diseases of plants and animals; entomology; apiculture; dairying; extension work.
7						Rice experiments; forage crops Chemistry: bacteriology: soils: field experiments:
23	2	7	8	286	14,000	sugar making; drainage.  Botany; bacteriology; inspection of fertilizers, feeding stuffs, and Paris green; horticulture; animal husbandry; diseases of animals; entomology; field experiments.
4						mology; field experiments. Chemistry; soils; fertilizers; field experiments; horticulture; feeding experiments; stock raising;
23	J		20	1,296	8,500	poultry experiments; darying. Chemistry; botany; analysis and inspection of foods, drugs, insecticides, fungicides, fertilizers, concentrated commercial feeding stuffs, and
14	3	4	14	18	27,000	agricultural seeds; calibration of creamery glass- ware; orcharding; plant pathology; biology; poultry breeding; plant breeding; entomology. Chemistry; fertilizers; field experiments; horticul-
20	0	10	_	-0-	00.000	ture; plant breeding; diseases of plants and ani- mals; feeding experiments; animal breeding; poultry raising; entomology; dairying. Chemistry; meteorology; analysis and inspection of
30	8	13	7	595	23,306	fertilizers and concentrated commercial feeding stuffs; inspection of creamery glassware and nur- series; pot, cylinder, and field experiments; hor- ticulture; plant breeding; diseases of plants and animals; digestion and feeding experiments; en- tomology; dairying; effect of electricity on plant growth.
29	16	9	6	369	67,000	Chemistry; analysis and control of fertilizers; bac- teriology; field experiments; horticulture; forest- ry; plant breeding; diseases of plants and ani- mals; feeding and breeding experiments; poultry
56	34		28	420	45,000	Fruit and vegetable breeding; insect pest investi- gation; orchard spraying; drainage; milling tests of cereal and flour; diseases of plants and animals;
18	10	5	20	548	22,000	plant and animal breeding; animal nutrition; farm management; ventilation; farm statistics. Fertilizers; field experiments; horticulture; biol- ogy; plant breeding; animal husbandry; dis- eases of animals; poultry culture; entomology; dairying; agricultural engineering.
52	42	20	19	461	11,000	Chemistry; soil survey; botany; field experiments; horticulture; diseases of plants and animals; feeding experiments; animal and plant breed-
3 18	10	11	14	285	9,650	ing; entomology; dairying; poultry; forestry.  Chemistry; meteorology; botany; field experiments; dry farming; horticulture; feeding and breeding experiments; poultry experiments; veterinary science; entomology; dairying; irri-
33	20	6	9	526	21, 250	gation and drainage.  Chemistry; botany; meteorology; soils; field experiments; horticulture; plant breeding; diseases of plants and animals; forestry; feeding and breeding experiments; entomology; dairying;

General statistics,

	Station.	Location.	Director.	Date of original organization.	Date of organization under Hatch Act.
33	Nevada	Reno	G. H. True		Dec. —, 1887
34	New Hampshire	Durham	J. C. Kendall	1886	Aug. 4,1887
35 36	New Jersey (State) New Jersey (College)	New Brunswickdo	J. G. Lipmandodo.	Mar. 10,1880	Apr. 26, 1888
37	New Mexico	Agricultural College	Luther Foster		Dec. 14, 1889
38	New York (State)	Geneva	W. H. Jordan	Mar. —, 1882	
39	New York (Cornell)	Ithaca	L. H. Bailey	1879	Apr. —, 1888
40	North Carolina (College).	West Raleigh	C. B. Williams	Mar. 12, 1877	Mar. 7, 1887
41	North Carolina (State).	Raleigh	B. W. Kilgore	1907	
42	North Dakota	Agricultural College	J. H. Worst		Mar. —, 1890
43	Ohio	Wooster	C. E. Thorne	Apr. 25,1882	Apr. 2, 1888
44	Oklahoma	Stillwater	J. A. Wilson		Dec. 25, 1890
45	Oregon	Corvallis	J. Withycombe	.,	July —, 1888
46	Pennsylvania	State College	• • • • • • • • • • • • • • • • • • • •		June 30, 1887
47 48 49	Pennsylvania (Nutri- tion). Porto Rico. Rhode Island	do			July 30,1888

## 1912--Continued.

Num- ber on	Num- ber of teach-	Number of persons on staff who assist	durin	cations g fiscal 1912.	Num- ber of names on	Principal lines of work.	
staff.	ers on staff.	in farmers' institutes.	Num- ber.	Pages.	mail- ing list.	•	
15	6	6	2	188	4,500	Chemistry; meteorology; botany; soils; field experiments; horticulture; plant breeding; forestry; animal feeding and breeding; plant diseases; veterinary science and bacteriology; zoology;	33
17	12	10	10	174	16, 901	entomology; irrigation. Chemistry; botany; field experiments; horticulture; plant breeding; breeding experiments; entomology.	34
16 14	6	9	13	421	7,700	Chemistry; oyster culture; botany; analyses of fertilizers, foods, commercial feeding stuffs, and insecticides: pot, cylinder, and field experiments; horticulture; floriculture; plant breeding; forestry; diseases of plants and animals; animal husbandry; dairy husbandry; poultry experiments; entomology; soil chemistry and bacteriology; soil surveys; irrigation; seed inspection.	35 36
21	12		5	333	5, 429	Chemistry; botany; soils; field crops; dry farming; horticulture; cactus investigations; nutrition; plant diseases; entomology; dairying; irrigation.	37
33		12	27	730	48, 200	Chemistry; bacteriology; meteorology; fertilizers; analysis and control of fertilizers; inspection of feeding stuffs, Paris green, and creamery glass- ware; field experiments; horticulture; plant breeding; diseases of plants; feeding experiments; poultry experiments; entomology; dairying;	38
46	2	1	149		28,000	soil studies. Chemistry; soils; field experiments; farm crops; farm management; hortfeulture; plant breeding; plant physiology; diseases of plants; feeding and breeding experiments; poultry husbandry; en-	39
17		. 6	3		17,500	tomology; dairying. Chemistry; soils; field experiments; horticulture; nitrification experiments; diseases of plants and animals; animal husbandry; poultry experi- ments; dairying; tests of farm machinery; cot- tonseed feeding; toxic investigations; entomology investigations; plant breeding investigations; horticulture and agronomic experiments.	40
32		7	12		3,500	Chemistry; soils; field experiments, torticulture; diseases of animals; feeding experiments; entomology; fertilizer experiments and analyses; inspection of foods and stock feeds; cooperative demonstration work with farmers; farmers' institutes.	41
45	25	6		18,000	15,000	Chemistry; soils; botany; field experiments; plant breeding; horticulture; forestry; diseases of plants and animals; analysis of foods and spraying materials; seed inspection; inspection and analysis of paints, drugs, proprietary products, and feeding stuffs; feeding and breeding experiments; poultry experiments; milling and chemical tests of wheat; drainage; farm engineering;	42
57	•••••	32	, 33	1,208	65,000	farm management.  Chemistry; soils; field experiments; botany; horticulture; plant breeding; forestry; diseases of plants; feeding experiments; entomology; nutri-	43
17	10	6	8	207	35,000	tion; farm management; dairying; climatology. Chemistry; agronomy; field experiments; horti- culture; forestry; botany; bacteriology; animal husbandry; dairying; veterinary science; ento-	44
39	20	17	11	322	23,000	mology. Chemistry; bacteriology; soils; fertilizers; field crops; horticulture; plant breeding and selection; diseases of plants; feeding experiments; poultry	45
51	21	21	7	161	43,500	experiments; entomology; dairying; irrigation. Chemistry; meteorology; fertilizers; horticulture; forestry; plant diseases; field experiments; feed- ing experiments; dairying; poultry experiments.	46
7	••••••						47
14	2	3	10	294	11, 470	Chemistry; meteorology; soils; analysis and in- spection of fertilizers and feeding stuffs; field and pot experiments; horticulture; poultry dis- eases, poultry feeding, and pigeon and poultry breeding.	48 49

## General statistics,

	Station.	Location.	Director.	Date of original organization.	Date of organization under Hatch Act.
50	South Carolina	Clemson College	J. N. Harper		Jan. —,1888
51	South Dakota	Brookings	J. W. Wilson		Mar. 13,1887
52	Tennessee	Knoxville	H. A. Morgan	June 8,1882	Aug. 4,1887
53	Texas	College Station	B. Youngblood		Apr. 3,1889
54	Utah	Logan	E, D, Ball		1890
55	Vermont	Burlington	J. L. Hills	Nov. 24,1886	Feb. 28,1888
56	Virginia	Blacksburg	S. W. Fletcher	1888	1891
57	do	Norfolk	T. C. Johnson	Feb. —,1907	
58	Washington	Pullman	R. W. Thatcher		1891
59	West Virginia	Morgantown	E. D. Sanderson		June 11,1888
<b>6</b> 0	Wisconsin	Madison	H. L. Russell	1883	1887
61	Wyoming	Laramie	G. H. Knight	•	Mar. 1,1891
	Total				

## 1912—Continued.

Num- ber on	ber of teach-	Number of persons on staff who assist	durin	cations g fiscal 1912.	Num- ber of names on	Principal lines of work.
staff.	ers on staff.	farmers' institutes.	Num- ber.	Pages.	mail- ing list.	
19	10	9	11	293	20,300	Chemistry; soils; botany; field experiments; horticulture; plant breeding; diseases of plants; feeding and breeding experiments; veterinary
20	14	6	8	216	22,000	Chemistry; horticulture; field experiments; plant breeding; diseases of plants and animals; ani-
21	7	11	3	91	13, 473	mal husbandry; dairying. Chemistry; soil investigations; inspection of fertilizers; field experiments; horticulture; plant breeding; seeds; weeds; diseases of plants and animals; feeding experiments; entomology; dairying; apiculture.
27	5		8	322	40,000	Chemistry; examination and comparison of com- mercial feeding stuffs and fertilizers; soils; field experiments; horticulture; plant breeding; feed- ing experiments; diseases of plants and animals and selection; entomology; cotton investiga-
26	9	9	4	127	10,500	tions; breeding experiments.  Chemistry of soils; field experiments; horticulture; diseases of plants; breeding and feeding experiments; poultry breeding; incubation; enterpolary in restriction and experiments.
18	7	7	. 8	632	13,000	tomology; irrigation and drainage; arid farming. Chemistry; botany; bacteriology; analysis and control of fertilizers and feeding stuffs; inspec- tion of creamery glassware; horticulture; dis- eases of plants; feeding and breeding experi- ments; dairying.
21	• • • • • • •			*****		Chemistry; field experiments; horticulture; plant breeding; soil bacteriology; mycology; breeding and feeding experiments; diseases of animals; dairying.
8		3	3	72	8,000	Field experiments; plant breeding; plant diseases;
32	15	11	15	225	16, 123	entomology.  Chemistry; plant physiology; bacteriology; soils; field experiments; horticulture; plant breeding; diseases of plants; feeding and breeding experiments; veterinary science; entomology; irrigations.
16	10		6	170	9, 476	tion; dry farming; clearing logged-off lands. Chemistry; effect of pressure on bacteria; artificial fixation of atmospheric nitrogen; analysis and control of fertilizers; soils; farm crops; horticulture; diseases of plants and animals; inspection of orchards and nurseries; feeding and breeding experiments; poultry experiments; entomology; dairying.
78	78	12	40	1,265	20,000	Chemistry; bacteriology; soils; field experiments; agronomy; tobacco and cranberry culture; horticulture; plant breeding; plant pathology; breeding and feeding experiments; poultry experiments; veterinary science; entomology; dairying; irrigation and drainage; agricultural engineering; agricultural economics; home economics; home economics; home economics; agricultural economics; home economics home.
13	9		5	209	7,000	nomics; extension. Chemistry; mycology; botany; meterology; soils; range improvement; fertilizers; field experiments; plant selection; poisonous-plant investigations; breeding and feeding experiments; wool investigation; veterinary science; irrigation; parasitology; effects of alkali on structural and other material.
,574	658	457	719	84, 841	1,016,613	

Revenue and additions

		Fed	eral.		Indi-		77	
	Station.	Hatch fund.	Adams fund.	State.	viduals and com- munities.	Fees.	Farm products.	Miscella- neous.
1 2	Alabama (College). Alabama (Cane-	\$15,000.00	\$15,000.00	\$34,982.85			\$834.72	\$3,622.28
3	brake). Alabama (Tuske-							
	gee).	15 000 00	15 000 00	9 700 00	en 500 00	\$2,500.00	2 625 00	2 518 06
5	Arizona	215,000.00	15,000 00 15,000.00	8,700.00 39,200.00	525.00		2, 625. 99 1, 176. 78	2,518.06 25,939.91
6 7	California	15,000.00 15,000.00	15,000.00 15,000.00	125, 275. 00 11, 250, 00	30.00	12,000.00	2,000.00 6,031.79	8, 120. 77
8	Connecticut (State) Connecticut t	7,500.00 7,500.00	7,500.00 7,500.00	11,250.00 18,500.00	14,019.88	11,500.00	386.99	370.08 1,899.15
9	(Storrs).	7,500.00	7, 500.00	3,875.00		*********		1,099.10
10 11	(Storrs). Delaware. Florida. Georgia. Idaho Illinois. Indiana. Iowa. Kansas. Kentucky. Louisiana. Maine. Maryland.	15,000.00	15,000.00 15,000.00				3,060.27 2,512.27 5,471.71 8,325.86 25,655.65	350. 42
12	Georgia	15,000.00	15, 000. 00 15, 000. 00	620.81			5, 471. 71	5,958.65
13 14	Idaho	15,000.00	15,000.00	168,000.00		• • • • • • • • • • • • • • • • • • • •	8, 325, 86 25, 655, 65	198.58 12,384.68
15	Indiana	15,000.00	15,000.00					82, 654, 36
16 17	Iowa	15,000.00	15,000.00	55,000.00 61,500.00 38,613.89 24,500.00			12, 326. 44	14, 198. 00 1, 778, 36
18	Kentucky	15,000.00	15,000.00	38, 613. 89		24, 010. 00 17, 000. 00	10, 474. 81	1,778.36 96,276.63
$\frac{19}{20}$	Louisiana	15,000.00	15,000.00	24,500.00		24,010.00 17,000.00	4,578.04 8,804.45	3,062.12 1,364.10
21	Maine Maryland Massachusetts	15,000.00 15,000.00	15,000.00	5,000.00 14,000.00			8,605.76	1,364.10 919.00
22	Massachusetts Michigan	15,000.00	15,000.00 15,000.00	16, 875. 00 6, 000. 00		10, 277. 00 5, 420. 00	6,613.10	9, 030. 59 3, 133. 73
24	Minnesota	15,000,00	15,000.00	1 103, 726, 08				173,508,03
25	Mississippi. Missouri (College) .	15,000.00 15,000.00	15,000.00 15,000.00	33, 150. 00	37 370.51	214.00 18,105.30	12, 294. 83 5, 780. 95	4,891.06 18,342.37
21 22 23 24 25 26 27 28 29 30	Missouri (Fruit)							
28	Montana Nebraska	15,000.00 15,000.00	15,000.00 15,000.00	55, 663. 45 5 40, 535. 60		• • • • • • • • • • • • • • • • • • • •	6,845.33	51,003.21
30	Nevada	° 15,000.00	715,000.00	5,000.00			8, 147. 42	788, 82
31 32 33	New Hampshire	15,000.00	15,000.00	94, 041. 96			464.83	4,586.31
33	New Jersey (State) New Jersey (College).	15,000.00	15,000.00				073.09	
34	New Mexico New York (State). New York (Cornel)	15,000.00	15,000.00	113,509.05	280.17	75.25	1,805.81	1,768.71 8,708.97
35 36	New York (State).	1,500.00 13,500.00 15,000.00	1,500.00 13,500.00 15,000.00	113, 509. 05				
37	North Carolina	15,000.00	15,000.00		i		6, 447. 22	1;839.51
38	(College). North Carolina (State)			•••••			•••••	• • • • • • • • • • • • • • • • • • • •
39	(State). North Dakota	15,000.00	15,000.00	13, 243. 35			15, 544. 25	19,615.03
40 41	Ohio Oklahoma	15,000,00	15,000.00 15,000.00	193, 500.00			10, 044. 20	172, 630. 00 3, 119. 97
42	Oregon	15,000.00	15,000.00	47, 073. 40			7, 252. 22	48, 129, 08
43 44	Oregon Pennsylvania Pennsylvania (Nu-	15,000.00	15,000.00	5,000.00			25, 908. 94	3,087.40
45	trition). Rhode Island	15,000.00	15,000.00					4,703.32 4,701.57
46	South Carolina	15,000.00	15,000.00 8 15,000.00	15 500 00			2,233.54	4,701.57
47 48	South Dakota Tennessee	15,000.00 15,000.00	15,000.00 15,000.00	13,300.00			7,881.78	6, 560. 41 254. 17
49	Tennessee Texas		15,000.00 15,000.00	99,000.00			2, 233. 54 1, 626. 54 7, 881. 78 1, 921. 38 1, 738. 58	2,668.69 573.07
50 51	Vermont	15,000.00	15,000.00 15,000.00 9 15,000.00 15,000.00	16,064.72 3,021.00	152.95	3,690.00		9.89
52	Virginia	15,000.00	9 15, 000. 00	9, 433. 32			4,001.68	320.88
53 54	Washington	15,000.00	10 15,000,00	20, 943. 64		699. 00 12 12,920.03	408.01 8,180.94	326. 39 5, 490. 71
55	Virginia Washington West Virginia Wisconsin Wyoming	15,000.00 15,000.00 15,000.00 15,000.00 15,000.00 15,000.00 15,000.00	15,000.00 15,000.00	3, 021. 00 9, 433. 32 20, 943. 64 11 11, 500. 00 15, 000. 00		11, 474. 03	1,629.04	9,000.00
56								
	Total	720,000.00	720,000.00	1, 492, 798. 12	54,878.51	129, 884. 61	230, 271. 81	720, 407. 04

<sup>1</sup> Including all balances, except from Federal funds.
2 Including a balance of \$12 from previous year.
3 Including a balance of \$49.20 from previous year.
4 Including a balance of \$12.76 from previous year.
5 Amount used by substations; as part of biennial appropriation ending Mar. 31, 1913.
6 Including a balance of \$883.24 from previous year.
7 Including a balance of \$1,035.18 from previous year.

to equipment, 1912.

			Addit	ions to equi	pment.			
Total.	Buildings.	Library.	Apparatus.	Farm implements.	Live stock.	Miscella- neous.1	Total.	
\$69, 439. 85	\$230.00	\$118.00	\$998.00	\$145.00	\$500.00	\$851.00	\$2,842.00	1 2
		75.00		150.00			325,00	3
48, 844, 05 96, 841, 69 169, 275, 00 55, 432, 56 59, 776, 95 20, 774, 15	950.00 4,150.00 59,693.01 1,790.69 58.00 65.65	59. 97 464. 24 1,022, 87 310. 21 943. 25 29. 41	391, 18 446, 74 3, 577, 10 1, 078, 06 225, 78 248, 70	999. 11 1, 480. 53 7, 510. 45 1, 153. 57 54. 00 31. 85	877.75 2,000.00 9,711.17 200.00 231.85	1,034.87 2,457.00 6,014.03 613.80 1,139.30 1,054.82	4,312.88 10,998.51 87,528.63 4,946.33 2,620.33 1,662.28	4 5 6 7 8 9
33, 060, 27 32, 862, 69 42, 051, 17 38, 524, 44 236, 040, 33 112, 654, 36 111, 524, 44 93, 278, 365, 33 86, 130, 16 62, 168, 55 53, 524, 76 72, 795, 69 44, 553, 73 207, 234, 11 80, 549, 89 119, 599, 13	3,000,00 1,000,00 1,672,99 798,91 5,199,44 32,931,80 605,81 125,000,00 15,000,54 8,360,35 1,450,12 3,275,00 536,190,00 49,182,10	420, 08 390, 00 426, 88 73, 44 106, 86 899, 96 98, 85 	720, 11 522, 52 451, 89 1, 851, 03 1, 278, 25 1, 631, 13 894, 37 1, 500, 00 1, 568, 57 1, 015, 03 512, 52 253, 99 772, 68 2, 179, 61 17, 276, 90 1, 000, 00 2, 266, 29	507. 45 213. 68 382.05 1, 025. 88 6, 152. 16 1, 408. 75 2, 000. 733. 57 863. 84 3, 265. 98 1, 647. 41 21.00 223. 86 6, 398. 88 1, 050. 00 788. 68	1,522.75 260.00 220.50 850.00 7,799.99 13,465.99 2,611.40 500.00 555.00 1,235.95 2,171.83 1,960.00 700.00 9,994.00 6,932.69	800.00 400.00 19.75 1,141.74 155,855.08 562.62 1,000.00 1,983.05 55.00 20,468.94 500.00 1,491.72	6, 970. 39 2, 786, 20 3, 174. 06 4, 599. 26 21, 678. 44 206, 102. 63 6, 041. 80 130, 000. 00 22, 052. 87 11, 720. 02 6, 849. 01 6, 175. 08 1, 673. 22 6, 781. 84 612, 319. 94 14, 510. 00 60, 682. 31	10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
92, 508. 78 121, 538. 81 43, 936. 24 35, 051. 14 94, 041. 96 30, 673. 89	14,000.00 19,300.00 611.85 264.73 23,664.75	144. 12 75. 07 625. 70 59. 38	119,00 1,000,00 480,34 938,70 171,89	1, 168. 00 800. 00 818. 25 79. 45 678. 72	400.00 3,200.00 1,260.00 62.32	392. 42 157. 79	16, 187, 00 24, 444, 12 3, 245, 51 2, 363, 32 24, 732, 53	28 29 30 31 32 33
33, 929, 94 125, 218, 02 27, 000, 00 38, 286, 73	1,028.20 1,309.25 3,000.00	12.59 1,146.90 77.44 160.00	241. 80 966. 60 53. 00	769.31 1,586.44 319.37 560.00	225.00 86.25 175.00 257.00	125. 22 435. 00	2, 276, 90 3, 786, 19 2, 006, 28 4, 465, 00	34 35 36 37
	1,500.00	250.00	500.00	300.00	1,800.00		4,350.00	38
62, 858. 38 411, 674. 25 33, 119. 97 132, 454. 70 63, 996. 34	21, 637. 05 417. 95 1, 331. 19 500. 00 125. 00	2, 143, 42 1, 441, 00 112, 28 746, 79 355, 00 274, 53	2,968.54 2,740.87 324.73 1,817.88 1,108.76 842.36	1, 822, 64 3, 802, 64 471, 60 2, 409, 72 738, 64 974, 00	2,579.36 4,134.41 259.75 4,208.95 902.25 389.00	7,247.88 464.20 201.20	16, 761. 84 33, 755. 97 2, 050. 51 10, 715. 73 3, 604. 65 2, 604. 89	39 40 41 42 43 44
34, 703. 32 36, 935. 11 53, 686. 95 38, 135. 95 89, 590. 07 48, 376. 37 36, 873. 84 43, 755. 88 52, 377. 04 68, 091. 68 65, 474. 03 31, 629. 04	125. 98 829. 01 7, 200. 00 15, 368. 15 7, 784. 57 659. 72 1, 581. 27 1, 266. 06 18, 476. 00 1, 011. 33	615.39 176.11 225.00 442.25 417.08 153.63 380.29 63.64 215.00 1,038.79 1,000.00	308. 69 559. 14 700. 00 1, 150. 25 1, 118. 02 411. 31 804. 97 50. 00 2, 089. 00 3, 784. 15 2, 737. 00 845. 28	61. 77 565. 69 360. 00 830. 74 6, 940. 59 1, 308. 31 415. 36 274. 86 526. 00 582. 24 1, 390. 00 628. 93	247. 75 440.00 3, 025. 00 3, 961. 33 148. 00 118. 25 1, 150. 00 55. 00 2, 484. 00 145. 00	499, 81 250, 00 938, 25 206, 07 837, 29 500, 00 4, 712, 00 311, 94 215, 221, 79	1, 859. 39 2, 569. 95 8, 735. 00 21, 754. 64 20, 427. 66 3, 518. 26 3, 300. 14 888. 55 5, 900. 00 6, 726. 24 30, 799. 00 3, 045. 70	45 46 47 48 49 50 51 52 53 54 55 56

<sup>8</sup> Including a balance of \$100 from previous year.
9 Including a balance of \$1,364.27 from previous year.
10 Including a balance of \$750 from previous year.
11 An additional sum is included in the annual appropriation for the university and station, but the amount is not ascertainable.
12 Revenue from fertilizers.
13 Including a balance of \$1,149.41 from previous year.

Expenditures from United States appropriation of Mar. 2, 1887, for the agricultural experiment stations for the year ended June 30, 1912.

					Classified expenditures	penditures.			
Station.	Amount of appropria- tion.	Salaries.	Labor.	Publica- tions.	Postage and stationery.	Freight and express.	Heat, light, and water.	Chemical supplies.	Seeds, plants, and sundry supplies.
Alahama	\$15,000,00	87 645 24	\$1 463 67	8190 15	\$590.31	8981 47	8491.51	8304 79	
Arizona	15,000.00	6,692.49	2, 456. 43	737.37	802.01	476.51	128.69	87.63	556.93
Arkansas.		7, 257.85	1,337.76	872.00	614.53	304.18	414.67	19.45	
California		6, 487. 56	6,003.64	198.19	525.60	198.55	136.15	441.09	
Connection (State)	7,500.00	9, 132. 70 6, 753, 25	244.88	2,200.72	613.84	128.38		5.40	
Connecticut (Storts)		6,383.48	517.32	10.00	69. 26	25.00	42.00	176.83	
Delaware		4,865.82	4,937.46		314.28	232.38	248.69	5.59	
Florida		6,688.37	2,802.92		375.47	271.10	171.13		
Georgia		5, 750.00	3,476.12		249.83	190.43	53.27	1.00	
Idano.		8, 259, 55	2,066.44		677.11	130.02	494.76	105.82	
Indiana	15,000.00	10, 744 94	1, 622, 45	916.85	1,088.90	26.36	169.45	8 20	174 91
TAKALOM O		7,000.00	1,586.32		437.87	169.68	68.51	159.62	
Kansa	15,000.00	9,483.00	3,172.55		36.47	48.36	15.53	387.30	
Kentucky		13, 497.51			366.74	198.82	292.09		
Louisiana		9, 249, 85	3,610.30		37.10	1.70			
Maine	15,000.00	5, 168. 71	2, 280. 37		468.37	331.07	393, 40	52.15	
Mossochusotte		2,030.95	9, 562, 19		275 76			111 111	
Michigan		8,520.70	2, 188, 66	53.58	214.42	85.25	123.67	770.84	
Minnesota	15,000.00	11,833.35	956.56		46.56			29.07	
Mississippi	15,000.00	6,842.81	2,368.23		332.23				
Missouri	15,000.00	8, 678.06	1,090.08		751, 45				
Montana	15,000.00	11,150.00	1,408.40		498.35	127.93			
Newada	15,000.00	7,476,88	5,555.05		195 10	43 00			
New Hampshire	15,000.00	8, 146, 22	1,665,33	669.37	507.33	279.98	667.95	44.51	
New Jersey	15,000.00	10, 101, 99	493.48		463.34	77.24			
New Mexico	15,000.00	7,521.66	3,389.28		432.79	318.29			
New York (State).	1,500.00	670.33	829.67						
New York (Cornell)	13, 500.00	6,588.31	2,987.88	698.05	1,116.30	62.08	69.32	77.54	498.06
North Carolina	15,000.00	5,321.58	2, 689, 29					13.47	670.33
North DakotaOhio	15,000.00	13,046,70	3, 634. 32	500.00				4.70	04.12
Oklahoma	15,000.00	9, 784, 86	2.054.15	532.97		71.35	46.62	137.78	308.87
Oregon	15,000.00	8, 251.66	1,933.31	119.28	162.09	136.84	187.39	241.93	441.22
Pennsylvania		8,385.85	3,807.72	1,527.04		118.96		63.77	58.22
Knode Island	15,000.00	8, 764. 09 1	2,620.72	3.05		86.36	482.48	14.13	231.00

<sup>1</sup> Including balance from previous year.

447.17 756.04 342.32 330.64 830.64 830.64 936.73 905.72 1103.00 110.09	17, 663. 74		Balances.	812.00
205.08 79.98 79.98 80.58 275.44 275.24 275.24 21.69 92.25	5,837.18		Buildings and repairs.	\$456.72 736.00 736.00 736.00 672.47 6.10 546.50 546.50 49.06 266.10
73.95 2.70 386.24 27.05 16.64 943.40 171.40	8,403.70		Contingent expenses.	8
70.86 70.05 71.20 191.18 23.97 30.15 165.22 165.22 16.48	5,916.61		Traveling expenses.	\$188. 50 819.11 819.15 819.11 819.15 819.11 819.15 819.11 819.15 819.11 819.15
276.71 350.23 350.23 350.33 587.53 823.44 823.44 368.45 664.76 261.51	19,724.19	tures.	Live stock.	\$107.00 377.77 5.30 5.30 108.30 260.00 51.
813.88 1,343.09 966.28 639.07 105.82 41.22 41.22 1,277.72 1,362.38	26, 946. 81	Classified expenditures	Scientific apparatus.	\$19.59 84.46 425.36 246.43 246.43 59.57 46.86 2.00 36.95 36.
2,842.25 1,561.62 2,466.45 2,006.75 2,038.21 2,758.17 2,657.15 527.50 3,476.66 2,091.12	112, 900. 62	Classi	Furniture and fixtures.	2137.0 945.37.0 26.54.5 26.54.5 26.55.65.5 28.55.65.5 28.55.65.5 28.55.65.5 28.55.65.5 28.44.2 28.55.65.5 28.55.65.
8,008.36 7,666.67 7,756.83 8,330.38 8,502.36 6,900.43 11,688.74 9,175.00	409, 247.33		Tools, implements, and machinery.	\$228.54 476.54 476.54 4814.86 481.40 81.40 82.21.56 82.21.60 82.81.84 108.90 228.81 83.31
15, 000.00 15, 000.00 15, 000.00 15, 000.00 15, 000.00 15, 000.00 15, 000.00 15, 000.00 15, 000.00	720, 000. 00		Library.	\$528.8 \$9.97 11.525 11.526 12.66 16.66 22.66 22.66 22.43 14.73 22.43 22.43 23.85 24.36 25.60 11.08 11.08 11.68
			Feeding stuffs.	\$1,512.97 1,077.67 1,077.67 1,077.67 1,525.09 1,465.84 476.93 929.95 1,628.54 1,628.54 1,628.54 1,628.54 1,628.54 1,638.93 1,586.39 1,586.39 1,586.39 1,586.39 1,586.39 1,586.39
			Fertilizers.	\$229.52 183.70 111.96 111.96 116.50 527.16 273.97 13.80 13.80 13.80 13.80 1439.80 1439.80 121.80
South Carolina South Dakota South Dakota Tennessee Texas Utah Vermont Virginia Washington West Virginia Wisconsin	Total.		Station.	Alabama. Arizona Arizona Arizona Arizona Caliornia Colorado Connecticu (State) Connecticu

Expenditures from United States appropriation of Mar. 2, 1887, for the agricultural experiment stations for the year ended June 30, 1912—Contd.

					Classifi	Classified expenditures	ures.				
. Station.	Fertilizers.	Feeding stuffs.	Library.	Tools, implements, and machinery.	Furniture and fixtures.	Scientific apparatus.	Live stock.	Traveling expenses.	Contingent expenses.	Buildings and repairs.	Balances.
Nebraska Nevada Nevada New Hampshire New Hersey New Mexico New York (State) North Carolina North Carolina Oklahoma Oregon Pennsylvania Rhodel Slahnd South Carolina Westhington Westhington Westhington	\$242.35 173.00 1,132.21 28.80 501.73 501.73 501.73 65.06 116.95 68.40 68.40 83.95	\$542.23 22.5.52 22.5.52 463.86 2,245.97 2	\$4.80 667.87 574.97 11.10 26.29 95.78 964.88 564.88 564.87 175.79 175.79 175.79 175.79 175.70	\$108. 66.25 147.09 147.09 148.12 228. 61 172. 73 119. 00 119.	\$23,525 17,525 20,525 20,525 20,505 2	\$228.55.55.55.55.55.55.55.55.55.55.55.55.55	\$256.64 175.00 213.40 1,474.06 2240.00 2240.00 221.35 913.98 28.00 174.33	\$25.6.2 332.0.2 332.0.2 346.3 346.3 346.3 36.3 36.3 36.3 36.3 3	88888 88888 88888 88888 88888 88888 8888	\$224.94 \$721.49 \$256.39 \$666.63 \$750.00 \$774.80 \$77.90 \$77.90 \$7.9	812.10
Wisconsin. Wyoming. Total.	7,002.65			280.73	9, 057. 31		10, 332. 53	280.24	25.00	139.16	459. 20

Disbursements from the United States Treasury to the States and Territories for Agricultural Experiment Stations under the acts of Congress approved Mar. 2, 1887, and Mar. 16, 1906.

State or Maritana	Hatch	Act.	Adams	Act.
State or Territory.	1888-1911	1912	1906–1911	1912
labama	\$359, 199, 34	\$15,000.00	\$56,619.89	\$15,000.0
rizona	324, 803, 15	15,000.00	60,000.00	15, 000.
rkansas	358, 163. 12	14,988.00	60,000.00	15,000.
alifornia	360, 000. 00	15,000.00	59,926.84	15,000.
olorado	359, 718. 82	15,000.00	58, 638. 93	15,000.
onnecticut	360,000.00	15,000.00	60,000.00	15,000.
akota Territory	56, 250, 00	*** 000 00		*** 000
elaware	359, 382, 87	15,000.00	57, 050. 12	15,000.
loridaeorgia	359, 966. 11 359, 981. 55	14,999.95   15,000.00	59, 996. 19 60, 000, 00	14, 999. 14, 720.
laho	284, 824. 13	15,000.00	55, 842, 22	15, 000.
linois	360, 000, 00	14, 564, 95	59, 864, 38	14, 987.
idiana	359, 901. 19	15, 000. 00	55, 000, 00	15, 000.
0W2	360, 000. 00	15,000.00	60, 000. 00	15,000.
ansas	360, 000, 00	15,000.00	60,000.00	15,000.
entucky	359, 996, 57	15,000.00	60,000.00	15,000.
ouisiana	360,000.00	15,000.00	60,000.00	15,000.
laine	359, 999. 62	15,000.00	60,000.00	15,000.
[aryland	359, 967. 40	15, 000. 00	59, 763. 99	15,000.
lassachusetts	359, 617. 70	15,000.00	60,000.00	15,000.
lichigan	359, 676. 10	15,000.00	56, 341. 20	15,000.
innesota	360, 000. 00	15,000.00	59, 345. 74	15,000.
lississippi	360,000.00	15,000.00	60,000.00	15,000.
issouri	355, 097. 24	15,000.00	60,000.00 57,417.04	15,000.
lontanaebraska	270, 000, 00 359, 932, 16	15,000.00 15,000.00	60,000,00	15,000. 15,000.
evada	359, 939, 32	15,000.00	59,663,58	15,000.
ew Hampshire	360, 000, 00	15, 000, 00	60, 000. 00	15, 000.
ew Jersey	359, 961, 97	15, 000. 00	59, 558, 78	15, 000
ew Mexico	324, 998. 90	15, 000, 00	60, 000, 00	15,000
ew York	359, 860, 54	15, 000, 00	59, 880. 85	15,000
orth Carolina	360, 000, 00	15,000.00	60,000.00	15,000.
orth Dakota	301, 778. 34	15,000.00	60, 000. 00	15,000
hio	360, 000. 00	15,000.00	58, 514. 02	15,000
klahoma	299, 270. 80	15,000.00	54,324.74	15,000
regon	345, 156. 64	15, 000. 00	55, 000. 00	15,000
ennsylvania	359, 967. 43	15,000.00	59, 995. 41	15,000
hode Island	360, 000. 00	15,000.00	57, 464. 20	15,000
outh Carolina	359, 542. 15	15, 000. 00 15, 000. 00	58, 460. 12 55, 000. 00	15,000 15,000
outh Dakotaennessee	303, 250. 00 360, 000. 00	15,000.00	60,000.00	15,000
emiessee	360,000.00	15,000.00	57, 876, 91	14,715
tah	225, 000, 00	15,000.00	59, 821. 94	15,000
ermont	360, 000. 00	15,000.00	60,000.00	15,000.
irginia	358, 741, 58	14,087.90	59,951.95	14, 997.
Vashington	299, 726. 75	15,000.00	56, 080. 11	15,000.
Vest Virginia.	359, 968. 71	15,000.00	57,859.12	15,000.
Visconsin	360,000.00	15,000.00	60,000.00	15,000.
Vyoming	345,000.00	15,000.00	60,000.00	15,000.
Total	6, 688, 640, 20	718, 850. 80	2,825,258.27	719, 420.

## Expenditures from United States appropriation of Mar. 16, 1906, for

					Clas	sified ex	penditur	es.		
	Station.	Amount of appropriation.	Salaries.	Labor.	Postage and station- ery.	Freight and express.	Heat, light, and water.	Chemical supplies.	Seeds, plants, and sundry supplies.	Ferti- lizers.
1	Alabama	\$15,000.00	\$9,967.49	\$2,161.68	\$168.53				\$316.39	\$146.70
2 3	Arizona	15,000.00	11, 899. 89		77.37	43.91	1.65		110.58	91.74
3	Arkansas	15,000.00	10,341.05	1, 203. 04	30. 89 205. 80	104. 80 79. 87	133.95 144.05	384.48 1,266.59	399. 52 218. 53	25. 00 30. 83
	California Colorado	15,000.00 15,000.00	7,110.83 11,494.12	2,369.07 226.98	113.79	213. 83		505.31	203. 86	30.00
	Connecticut	7,500.00	4, 671. 41		84. 22	62.34	429.11	689.71	162.48	17.03
- ]	(State). Connecticu	7,500.00	5,039.06		91.47		35. 29	165.15	659. 99	6.50
	(Storrs).	15 000 00	10 505 51	933.59	12.05	32.49	162.93	553.12	325.96	105.00
8	Delaware Florida	15,000.00 15,000.00	10,505.51 11,661.26		52. 29	169.09				9.00
	Georgia	15,000.00	9, 450. 00		182.00				138. 22	200.14
1	Idaho	15,000.00	9, 972. 47	1, 137, 65	46.42		350. 83		477.30	
2	Illinois	15,000.00	10, 719. 77	3,053.39	221.00			84.44	46.09	• • • • • • • •
3	Indiana	15,000.00	11, 193. 18 9, 024. 49	281.76 2,391.68	42.53 28.91	14. 09 44. 78				• • • • • • •
4 5	Iowa Kansas	15,000.00 15,000.00	5, 083. 40	4,617.82		238. 01	18.66			
6	Kentucky	15,000.00	14,353.59		9.00			122.97	5.00	
7	Louisiana	15,000.00	12, 188. 84	564.56	36.63	102.44	302.09	203.94		
8	Maine	15,000.00	13, 181. 92	112.94	22. 22	73.06	134.15	.30		57. 77
9	Maryland	15,000.00 15,000.00	10, 415. 69 12, 650. 33	264. 75 836. 74	20. 25 53. 47	22. 82	525. 69 71. 76			71. 2
	Massachusetts Michigan	15,000.00	11,086.16		11.86			0 = 00		5. 72
2	Minnesota	15,000.00	12, 288, 54	1, 226, 42	65. 20			210. 28	53.84	
2	Mississippi	15,000.00	4,094.20	4, 304, 33	6.19	283.50	2.06	2. 22	474.12	
4	Missouri	15,000.00	7, 119. 03	1,779.66	16.10		85. 69		324.35	34.58
5	Montana	15,000.00	10, 840, 00		67. 71 1. 23	96. 63 108. 07		506.32 533.35		• • • • • • • •
6	Nebraska Nevada	15,000.00 115,000.00	10, 241. 80 12, 351. 31	1,730.84 155.50	67. 02	172.57	85.50			
8	New Hampshire.	15,000.00	9,349.19	2, 989. 18	64.35	56. 90		146.08	307.87	192.6
9	New Jersey	15,000.00	10,538.34	1,082.03	27.34	51.50				167. 20
0	New Mexico	15,000.00	9,380.42	2,068.58	87.54	307.77	153.46	774.10	464.11	
2	New York (State) New York (Cor-	1,500.00 13,500.00	1,500.00 9,231.06	2, 689. 61	160. 86	20.19		401.42	108.31	2.00
3	nell). North Carolina	15,000.00	11, 248. 47	1,241.43	227.60	65. 95	33.79	251.48	127.07	217.8
4	North Dakota	15,000.00	10,523.02	1,515.05	13.68	41.51		502. 76	247.19	14.3
5	Ohio	15,000.00		350.65	53.50		100.0	687. 93		
6	Oklahoma	15,000.00	9, 407. 28 10, 711. 29		2. 75 9. 00					
7 8	Oregon Pennsylvania	15,000.00 15,000.00	9, 458. 91	460.38 1,047.71	9.00 14.42					1,143.2
9	Rhode Island	15,000.00	8, 622. 90	3, 291. 01	36.09					39. 40
0	South Carolina	115,000.00	7, 799. 97	3,336.01	137.12	79.88	105.62	231.69	532.98	378.33
1	South Dakota	15,000.00	7,118.34	3,637.28	3.16	655.50				27. 00
2	Tennessee	15,000.00	10, 568. 31	911.71	14.70	89.53				11. 78 284. 00
3 4	Texas Utah	15,000.00 15,000.00	8, 912. 88 8, 583. 35	1,263.00 3,032.29	80. 15 55. 80		289. 50	1,161.53 786.84		20%, 00
5	Vermont	15,000.00	8,083.65		44. 82					
6	Virginia	115,000.00	9,824.82	1, 230. 44	43.37	147.30	61.10	506. 86	181.60	93.00
6	wasnington	15,000 00	9,314.80	2,073.10			15. 10		163.10	
8	West Virginia			1,264.50	16.45		540 00	339. 97 975. 21	5.00	6. 78
9	Wisconsin Wyoming		8,500.00 11,610.00		7. 45 12. 25	161.05	540. 22 162. 72		103.63	0, 78
7										
		720,000.00								

<sup>&</sup>lt;sup>1</sup> Including balance from previous year.

the agricultural experiment stations for the year ended June 30, 1912.

			Cl	assified ex	penditures				
Feeding stuffs.	Library.	Tools, imple- ments, and ma- chinery.	Furniture and fixtures.	Scientific appa- ratus.	Live stock.	Traveling expenses.	Contin- gent expenses.	Build- ings and repairs.	Bal- ances.
\$28. 17	\$58.91	\$120.69	\$307.27	\$351.74	<b>\$120.65</b>	\$75.09		\$296.45	
5. 40	110 40	228. 49	280. 48	196. 52		115. 50		78. 87	
8. 78	116.46 34.28	391. 79 1, 023. 85	296. 16 124. 45	474.60 685.27	214. 83 101. 05	1 078 06	\$8.00	723.68	
	115. 75	154.63	172. 65	607. 08	101.05	453 40	\$0.00	738 60	
182.08		9.96		107. 68		101.55		138.00	
121, 80	13.05	31, 85		189. 13					
	115. 82			304 30					
	92. 08 185. 38	140.61	5, 40	322, 52		799. 76		184. 21	
1,019.37	185.38	141.95	82.30	451.89	7.00	149.35		184. 21 750. 00 111. 47 418. 12 8. 00 27. 49 288. 87 701. 22	279.50
	58. 69	244. 43	43.90	1, 251. 10	175 00	405.30		111. 47	
419. 15 172. 20	203.05	110. 52	74. 87	12.97 640.01	175.00 766.82	071 20	2 00		12. 76
1,346.70	200.00	188. 60	20.00	347.37	100. 82	111 05	3.00		
957. 48	32. 16	878. 59	119. 35	146. 61	868.50	422. 89		418, 12	
				349.77	18.00	63. 67	70.00	8.00	
135. 47	110. 85	197. 99	67.54	545. 75		329. 14		27.49	
18. 70 1, 118. 60	42. 80 408. 51	51. 13 294. 95	24. 44 106. 25	314.62 217.97	10. 90 300. 00	222. 13	• • • • • • • • • • • • • • • • • • • •	288. 87	• • • • • • • •
1, 110, 00	2 00	8.40	417. 70	308 68	300.00	24 95	••••••	140.58	
	2.00 23.17	0. 10	111.10	1, 566. 73	1.00	21. 00		152, 44	
60.01		112.83	155.91	367.84	55, 50	299.83		100. 92	
1,311.91		824.92	112.59		3, 337. 50				
1,914.61			36. 75	165. 95	1,410.65	108. 17	14. 75	426. 12	
113. 40 397. 27 210. 00	83. 10	577. 08 294. 18	57.30 23.80	341.34	60.00	210.78		192. 40	
210.00	22. 04 69. 76	200. 10	68. 50	749.30 435.39	110.00	402 77	14 75	14 55	
752. 94	17. 83	70. 41	33. 92	427. 01	62.32	343. 12	11.10	186, 21	
240.00	322.06	432.62	130. 50	560.47	237, 50			170.67	
348.56		451.12	232. 50	106.90	225, 00			400.00	
	66.34	83.76	41. 87			51.96		642.62	
452, 38	134. 40	145. 97	345. 62	53.30		72 05		204.00	
523. 15	2.54	50.98	87.70	394. 43	647. 60	68, 99		367. 05	
84, 00	17, 45	2.50 199.50	474. 20	427.90		21.05		102, 48	
1,047.00	13.50	199.50	29.80	319.30	120. 75	151.88		310. 25	
597. 40	16. 21	48. 70	39.90	1,043.93	2.00	481. 40		379. 53	
852.71	81. 62 50. 54	238. 64 367. 31	8. 95	767. 50 294. 55	243. 25	530.07		154, 35	
1,036.76	83. 90	52.50	0.90	547. 03	200.00	187 10		201 11	
669. 83	60. 45	195. 85	92. 26	574.69	70.50	77. 31		145. 33	
	236. 32	58. 75	185. 40	1, 130, 73		155. 42		358. 71	
241.30	261. 33	213. 09	140. 14	850. 15	173. 75	19.30		749. 16	284, 65
690. 10	34. 82 92. 51	642. 70	44.96	182. 36 725. 71		315. 75	• • • • • • • • • • • • • • • • • • • •	133, 25	
2, 213. 16 368 35	92. 51 22. 57	14.00	30. 50 194. 44	735. 71 284. 45	1 500 00	389 68		140 92	9 10
368. 35 113. 82		296. 29	130. 45	1, 336. 64	1,500.00 35.00	776, 49		177, 45	2. 19
882. 19	15.30			1,533.72					
1,654.04 578.03	87. 07	47. 50 40. 30		890. 60 756. 85	15. 00 227. 35			304, 63	
22, 886. 82	3, 404. 62					11, 151. 33			

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